VRIJE UNIVERSITEIT BRUSSEL

GHENT UNIVERSITY

Study into the characteristics and quality of life of older offenders

Stefaan De Smet

Proefschrift ingediend tot het behalen van de academische graad van
Doctor in de Pedagogische Wetenschappen:
Agogische Wetenschappen (Vrije Universiteit Brussel) en
Doctor in de Pedagogische Wetenschappen (Universiteit Gent)

Promotoren:
Prof. Dr. Liesbeth De Donder voor de Vrije Universiteit Brussel
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The good life is a process, not a state of being.
It is a direction not a destination.

(Carl Rogers, 1953)

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Acknowledgements en dankwoord

"Waar is de tijd naartoe?" Het was een vaak gehoorde bedenking die de respondenten maakten tijdens de interviews die we met hen deden, een uitdrukking die evenmin misstaat als aanhef voor dit dankwoord dat ik in de eerste plaats graag aan hen richt.

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Table of Contents

Chapter 1

General Introduction

This chapter is partly based on the publication:

De Smet, S., Vandevelde, S., Verté, D., & Broekaert, E. (2010). What is currently known about older mentally Ill offenders in forensic contexts: results from a literature review. *International Journal Of Social Sciences And Humanity Studies*, *2*(1), 127–135.

Abstract

This chapter provides a general introduction to the dissertation. First, the definition and the demographic evolution of aging prison populations are described. Second, the differentiation between older convicted and older forensic psychiatric patients is elaborated. Third, characteristics of the criminal offences committed by older offenders are presented and older "first time" offenders are distinguished from other older offenders with more "chronic" criminal pathways. Fourth, the theoretical frameworks that underpin this dissertation are introduced. Offender rehabilitation theories, i.e. the Good Lives Model and the Risk Need Responsivity Model; and Quality of Life as operationalized by the WHO in physical, psychological, social and environmental domains. Finally, the research questions, the aims and the methodology of the dissertation are presented.

1.1 Introduction

In most Western countries, both in prisons and in forensic psychiatric services, the number of aging offenders is rising (Lightbody, Gow, & Gibb, 2010; Davoren et al., 2015). Older offenders are characterized by complex mental and physical (health care) needs, that are more prevalent as compared to the occurrence in younger offenders and aging peers in the community (Yorston & Taylor, 2006). In addition, age-associated health issues are reported to emerge at relative young age, regularly already from the age of fifty (Wallace, Loeffelholz & Sales, 1992; Fazel, Hope, O'Donnell, Piper, & Jacoby, 2001; Aday, 2003; Williams & Abraldes, 2007; Aday, 2013). This could be explained by the assumption that offenders may be exposed to accelerated aging, due to socio-economic disadvantaged living circumstances before incarceration (Price, 2006) and stress factors inside prison, such as victimization and loneliness (Bretschneider, Elger, & Wangmo, 2013).

The present dissertation contributes to the literature by studying the characteristics of older offenders including both older convicted offenders and older forensic psychiatric patients in Flanders. In line with recent developments in the rehabilitation of offenders (Barendregt, Van der Laan, Bongers, & van Nieuwenhuizen, 2013; Van Damme, 2015), this study draws on the Quality of Life-framework, related to the strengths-based Good Lives Model for offender rehabilitation (Ward, Yates, & Willis, 2012). A special focus is placed on how forensic care trajectories are perceived by older forensic psychiatric patients themselves. Based on their individual perspectives on Quality of Life and the needs of older offenders, implications for an approach that surpasses a more traditional exclusively risk-oriented focus on offender rehabilitation are presented.

1.2 Definition of an age threshold for older offenders

The definition of aging depends on a number of factors, e.g. relating to the living conditions in diverse contexts. Illustrative in this respect is the fact that the average age expectancy for people in Belgium is 81.1 years while in Sierra Leone this is only 46 years of age (WHO, 2015).

Most U.S.-publications are based on the assumption that offenders seem to age faster due to the consequences of a harsher lifestyle, and accordingly apply thresholds of fifty-five (Human Rights Watch, 2012) or even fifty years in order to demarcate the subpopulation of older offenders (Johnson, 1988; Aday, 1994). In this respect, risk factors (e.g. drug and alcohol abuse), the lack of appropriate health care prior to incarceration, a poor diet, and brain damage due to violence are put forward to support this hypothesis of accelerated ageing (Fazel & Grann, 2002; Loeb & AbuDagga, 2006). In addition, Williams (2006) refers to specific stress factors inherent to the life inside prison that may accelerate the ageing process such as abrupt changes in the environment, feelings of isolation, ostracism from friends and family, the prospect of living a large part or sometimes even an entire life in confinement and the threat of victimization.

However, Newman and colleagues indicated that the (non) availability of data may play a role as well: "many studies usually draw the line at higher ages if enough data are available about people of those ages" (as cited in Uzoaba, 1998, p. 2). Accordingly, Uzoaba (1998) proposes a classification of "younger offenders" under fifty years of age, "older offenders", classified as those between 50-64 years and "elderly offenders" who are 65 years and older.

Contrary to the U.S., most European publications on older offenders apply age limits of 60 years of age (Fenton & Fenwick, 1995; Piper & Jacoby, 2001; Fazel & Grann, 2002; Fazel, Hope, O'Donnell, Wong, Lumsden, Fenton, Fenwick, 1995; Yorston & Taylor, 2006; Davoren et al., 2015) or 65 years of age (Curtice, Parker, Wismayer & Tomison,2003; Tomar, Treasaden, & Shah, 2005). Furthermore, Gallagher (2001) indicates that there is a lack of empirical evidence to support the assumption of accelerated ageing.

In the present study, an age threshold of 60 years is applied which is in accordance with 'the agreed cut-off age for older persons' as defined by the World Health Organization (WHO) and the United Nations (UN) (Bretschneider et al., 2013, p. 268).

1.3 Demographic evolution in aging prison populations

The increasing prevalence of older prisoners has been reported in many countries, including the U.S., the U.K., Sweden, France, Canada, Australia and Japan (Aday, 2013; Davoren et al., 2015). Aging occurs strongest in U.S. prisons which can be explained by the increased austerity in sentencing laws that since the mid-1970's were implemented in approximately half of the U.S.. According to the Institution for Criminal Policy Research, the U.S. had a prison rate of 693 prisoners per 100.000 inhabitants in 2015, which is six times higher in comparison to the Belgian situation in the same year (105/100.000).

Between 1995 and 2010, the increase of older prisoners aged 55 years and over was calculated to be 282% in U.S. prisons, which is seven times higher than the increase of the total prison population (42.1%) in the same period. In 2010, older prisoners aged 55 or over accounted for 8% of the total U.S. prison population (Bureau of justice Statistics, cited in Human Rights Watch, 2012). In England and Wales, the percentage of prisoners of 60 years and older in the period of 2004 until 2014 increased with 125% (compared to 15% for the whole prison population in the same period). In 2014, prisoners aged 60 years and older and 50 years and older represented 4.4% and 13% respectively of the prison population in England and Wales (Ministry of Justice, 2014). In Belgium, the prison population increased from 9.330 in 2005 to 11.769 in 2014[1], an increase of 26.4% (Statbel, 2016). Figure 1 shows that in the same period the number of older prisoners (60 years and over) in Flanders increased from 146 to 272, a relative growth of 86.3%.

1 Since 2014 the number of Belgian prisoners is decreasing, which may partly be attributed to the increase of electronic monitoring (Beyens & Roosen, 2016)

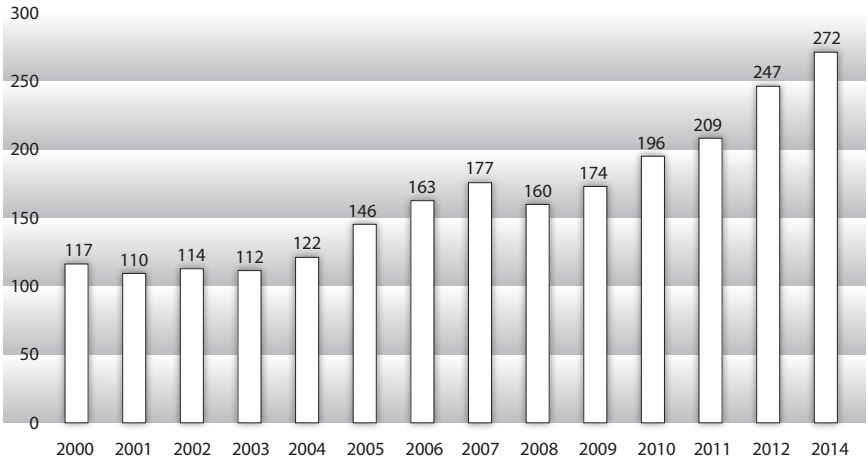

Figure 1. Evolution of number of all prisoners aged 60 years and over in Flanders (Federal Prison Administration, 2014)

1.4 Older convicted prisoners and older forensic psychiatric patients

Prisoners can be classified according to their legal status as (1) remand prisoners that are in custody before a possible conviction; (2) convicted prisoners; and (3) forensic psychiatric patients ("*geïnterneerden*" in Dutch). Forensic psychiatric patients have been deemed criminally irresponsible for their offences, because they suffered from a mental disorder, at the time of the offense, which affected their capacity to judge or control their actions. This mental state has to be present at the time of the forensic psychiatric evaluation, there should be a link with the committed offence and the risk on recidivism because of the investigated mental disorder(s) should be present (Schipaanboord & Vander Beken, 2015)[2]. In the international literature, this population is also referred to as 'legally insane offenders', 'legally irresponsible offenders' or 'criminal irresponsible offenders' (Mellsop et al., 2016). From a legal perspective, forensic psychiatric patients are not guilty for their offences and consequently they cannot be convicted. Instead, a 'measure of internment' is imposed in Belgium (including the region of Flanders), which involves that forensic psychiatric patients should receive mandated care, that could be provided in psychiatric hospitals, services for persons with intellectual disabilities, forensic psychiatric institutions, sheltered housing or in the community if attainable (Vandevelde et al., 2011; Van Assche, 2013).

In 2011, we counted 174 older forensic psychiatric patients (aged 60 years and over) in

2 In Belgium the Law of 4th May 2016 stipulates a number of additional restrictions in the application of the measure of internment ("legal insanity"). In this regard the imposition of the internment measure is no longer eligible for "less serious" offences that do not threat or affect the physical or mental integrity of the victim (Vogelaere, 2016).

Flanders, of which approximately 30% was incarcerated, 40% resided in institutional care facilities and 30% lived in the community. In the Flemish population of forensic psychiatric patients, older forensic psychiatric patients accounted for 8.9% (174/1962) in 2011.

More recent figures of 2014 indicate that 272 prisoners, residing in 16 different prisons, were aged 60 years or older (cf. Table 1).

Table 1

Prison population of prisoners aged 60 years and over in Flemish prisons
(reference day: 04/02/2014)

Prison	Remand	Convicted	Forensic psychiatric patients	Other*	Total
Merksplas	2	14	47	2	65
Brugge	17	33	6	6	62
Leuven Centraal	0	29	0	2	31
Wortel (incl. Tilburg)	0	21	0	5	26
Turnhout	2	2	14	0	18
Hasselt Nieuw	6	12	0	1	19
Dendermonde	3	5	0	0	8
Hoogstraten	0	5	0	0	5
Gent	2	3	1	1	7
Oudenaarde	1	4	0	0	5
Antwerpen	11	1	2	0	14
Ruiselede	0	3	0	0	3
Leuven Hulp	2	0	2	0	4
Ieper	2	1	0	0	3
Mechelen	1	1	0	0	2
Total	49	134	72	17	272[3]

* Others= prisoners in specific legal categories such as vagrancy and people without papers

The incarceration of forensic psychiatric patients in Belgian prisons has recurrently been brought to the political and public attention by forensic psychiatric patients and their representatives, as well as by academics and professionals (Van Assche, 2013). Furthermore, the Belgian State has repeatedly been convicted by the European Court of Human Rights for not appropriately treating forensic psychiatric patients (Heimans, Vanderbeken & Schipaanboord, 2014).Compared to the population of imprisoned offenders, the subpopulation of older forensic psychiatric patients is only scantly studied. As far as we could retrieve, the majority of available studies focus on older forensic patients in forensic psychiatric settings, including small and highly selected subgroups such as sex offenders (Fazel, Hope, O'Donnell, & Jacoby, 2002), persons with anti-social personality disorders (Alphen, Nijhuis, & Oei, 2007) and ageing patients in high security

3 At 01/04/2016 the following numbers were reported: remand, n= 41; convicted, n= 129; forensic psychiatric patients, n= 47, other, n= 16.

settings (McLeod, Yorston, & Gibb, 2008; Yorston & Taylor, 2009). Publications about the situation of older forensic psychiatric patients living in the community (O'Sullivan et al., 2007) are less frequently available.

1.5 Legal characteristics of older offenders

1.5.1 Criminal profile of convicted prisoners.

Offenders convicted for violent crimes (including violent sex offenses) receive the longest prison sentences and are more likely to grow old behind bars (Human Rights Watch, 2012). Feldmeyer & Steffensmeier (2007) have investigated the pattern in offences committed by older offenders during the period 1980 – 2004 in the U.S. They concluded that older offenders had the lowest arrest rates in comparison with any other age group in the population of offenders, which especially accounted for the category of serious offences. On the other hand, arrests of older people mostly related to minor offenses (e.g. littering, loitering, public drinking, panhandling and prostitution) and alcohol-related violations appeared to be more prevalent. According to Feldmeyer & Steffensmeier (2007), crime rates for older offenders did not increase in level or seriousness in recent decades.
In contrast, Alphen and Oei (2011) reported that older people (60 years and older) in the Netherlands are increasingly facing courts. The authors discussed a number of possible reasons, including age-related conditions such as fronto-temporal neurodegeneration and dementia and non-age-related conditions such as schizophrenia. Also socio-economic factors, including financial and material poverty, were mentioned. From a psycho-social perspective, loneliness, social isolation and boredom were presumed to be triggers for less serious crimes such as shoplifting.

1.5.2 Criminal profile of older forensic psychiatric patients

Similar to convicted older prisoners, violent and sexual offences were more prominent among older forensic psychiatric patients in comparison with their younger peers (Fazel & Grann, 2002). Coid and colleagues (2002) found significant higher rates for homicide but, contrary to the findings by Fazel and colleagues (2002), similar rates for sexual offences in elderly patients admitted to secure forensic psychiatry services compared to the younger patients.
O'Sullivan & Chesterman (2007) found that 37,5% of the older forensic psychiatric patients in a forensic psychiatric hospital had committed homicide, 25% attempted murder and 7,1% sexual offences. No significant differences were found between offenders who committed their crime earlier in lifetime and first time offenders later in lifetime. Rayel (2000) found that 77% of the older offenders in a maximum-security forensic hospital had been involved in violent crimes and that 27% had a criminal history of sexual assault arrests. In line with the findings of Aday (2003) on older sentenced offenders, Wong and colleagues (1995) reported that sex offending was common as well in first time older forensic psychiatric patients (offence committed after the age of 50 years).

1.6 Theoretical frameworks

Up until now, the scientific literature on older offenders is primarily characterized by a focus on criminological (risk-oriented) and medical (psychiatric) aspects (Koenig, Johnson, Bellard, Denker, & Fenlon, 1995; Rayel, 2000; Fazel et al., 2001; Coid, Fazel & Kahtan, 2002; Fazel, McMillan, & O'Donnell, 2002; Fazel, Sjöstedt, Långström & Grann, 2006; Williams, 2006; Aliustaoğlu et al., 2011; Belluck, 2012). Recently, strengths-based rehabilitation theories emerged, including the Good Lives Model (GLM) (Ward, Mann, & Gannon, 2007; Ward et al., 2012; Vandevelde et al., 2016).

The GLM supports a more positive approach towards offenders, as the focus is placed on life priorities of the offender and on external factors that are supportive for desistance-oriented interventions (Purvis, Ward, & Willis, 2011, p.7). The GLM is related to other strengths-based approaches and concepts, such as recovery and Quality of Life (Bouman, De Ruiter, & Schene, 2010; Barendregt et al., 2013; Van Damme, 2015). Up until now, the GLM has not been explicitly linked to the population of older offenders. The present dissertation aims to tackle this dearth by focusing on Quality of Life and human needs/priorities of older offenders, in addition to more "traditional" indicators as criminological profile and psychopathology.

1.7 Offender rehabilitation theories

Since the 1990's, the Risk-Need-Responsivity model (RNR) is internationally considered as the most implemented theoretical framework for the rehabilitation of offenders. The RNR-treatment model is built on three core principles: 1) the risk principle or the assumption that the extent to which treatment is supplied must be in proportion to the offender's risk to reoffend; 2) the need principle or the importance to focus treatment on criminogenic needs that are associated with criminal behavior; and 3) the responsivity principle that emphasizes that the approach should be adapted to the personal capabilities and characteristics of the offender; this relates to both offender characteristics, treatment staff features, treatment / prison service climate and the interaction between these factors (Bonta & Andrews, 2007; Decoene & Vandevelde, 2016).

Starting from the principles in the RNR-model, the GLM expanded the focus by promoting offenders' personal goals while at the same time managing the risks for reoffending (Barnao, Ward, & Casey, 2015).

The GLM is a strength-based approach that focuses on the identification of (internal and external) obstacles in life that prevent the offender's capacity to meet his or her fundamental human needs (or 'primary goods') (Ward, 2002). In other words: dynamic risk factors (criminogenic needs in terms of the RNR-model) are seen as obstacles in securing a good life (Ward, 2012) (cf. Figure 2). According to the GLM, the emphasis of offender rehabilitation relates to supporting pro-social attainment of primary human goods in order to develop a 'good life' (Barnao, Ward, & Robertson, 2016). "A good life

becomes possible when an individual possesses the necessary conditions for achieving primary goods, has access to primary goods, and lives a life characterized by the instantiation of these goods. The chances of living a good life depend on the degree to which the facts of the body, self, and social life are established in human beings" (Ward, 2002, p. 515). In this description, 'body' refers to basic physiological needs e.g. physical safety; 'self' refers to basic psychological capacities e.g. autonomy; and 'social life' refers to the need for relatedness e.g. family contacts (Kekes, 1989 in Ward, 2002). In the GLM, these basic facts have been operationalized in the definition of eleven primary goods (figure 2): (1) life (including healthy living and functioning and basic survival); (2) knowledge (learning, knowing); (3) being good at, or excelling in hobbies/recreational pursuits; (4) being good at or excelling in work; (5) personal choice and independence; (6) peace of mind (i.e., freedom from emotional turmoil and stress); (7) friendships and relationships (including intimate, family, and friend relationships); (8) experiencing a sense of community (i.e., belonging to a group); (9) spirituality (in the broad sense of having meaning and purpose in life); (10) happiness; and, (11) creativity (Ward, 2012). Secondary goods in the GLM (figure 2) are the way in which the primary goods can be attained e.g. non-criminal citizens will seek for the fourth primary goal 'being good at work" by carrying out a specific job (researcher, baker,…) in which they can realize themselves and feel respected. Ward and Brown (2004) stated that in case of criminal behavior, four major types of difficulties may occur (1) problems with the means used to secure goods (2) a lack of scope within a good lives plan, (3) the presence of conflict among goals (goods sought) or incoherence (4) a lack of the necessary capacities to form and adjust a good lives plan to changing circumstances (e.g. impulsive decision making). Figure 2 represents the way these obstacles in the life of older forensic psychiatric patients and older prisoners may interact with seeking primary goods.

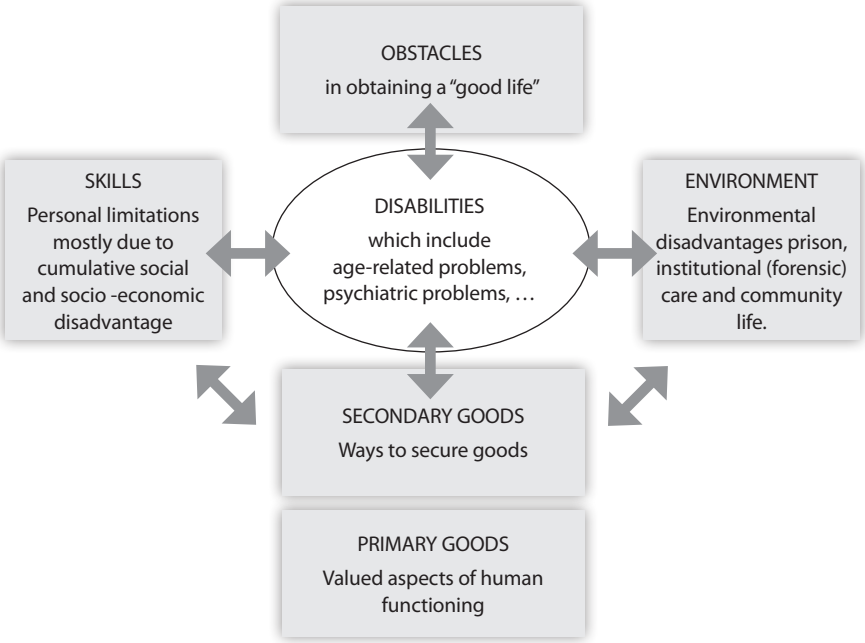

Figure 2 ***Good Lives Model – modification for older offenders (with disabilities) (figure adapted from and based on Barnao et al. (2010, p. 207) and Wing (2015, p. 9).***

1.8 The concept of Quality of Life

1.8.1 Theoretical construct of Quality of Life and offenders

Already in 1995, Farquhar (1995) stated that definitions of Quality of Life were as numerous and inconsistent as the methods of assessing it. Essentially, Quality of Life is understood to be both subjective (from a personal perspective) and multidimensional, including physical well-being, functional ability, emotional well-being, and social well-being (Cella, 1994). For example, Schalock (as cited in Claes, 2015) has developed a conceptual framework in which eight Quality of Life domains are integrated: (1) Personal Development, (2) Self-Determination, (3) Interpersonal Relations, (4) Social Inclusion, (5) Rights, (6) Emotional Well-Being, (7) Physical Well-Being and (8) Material Well-Being. According to the World Health Organization (WHO), Quality of Life is defined as 'the individual's perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns' (Skevington, Lotfy, & O'Connell, 2004, p299).

The WHO has developed a multidimensional questionnaire, the WHOQOL-100, that scores particular facets of Quality of Life (e.g. positive feelings, social support, financial resources), broader domains (e.g. physical, psychological, social relationships and environment), and an overall evaluation of Quality of Life and general health. A short

version, the WHOQOL-BREF, leads to the same domain scores, but includes no individual facet scores (WHO, 1997).

Today, the Quality of Life construct is considered as a paradigm shift in outcome measurement in different fields as it moves the focus from the persons' symptoms to a more holistic approach of individual functioning (Hickey, Barker, McGee, & O'Boyle, 2005; Claes, 2011; Morisse, Vandemaele, Claes, Claes, & Vandevelde, 2013). Schalock (2004) indicates that the concept of Quality of Life has become a focus for research and practice in the fields of education/special (needs) education, health care , social services (disabilities and ageing), and family studies. In criminological research, Quality of Life is increasingly used as an outcome indicator in addition to other indicators, such as recidivism rates (Fitzpatrick et al., 2010). In this regard, improving the Quality of Life early in life is increasingly assumed to be essential in order to prevent the involvement in delinquency in the life course (Chan, 2015; Jolliffe, Farrington, Loeber, & Pardini, 2016). Equally, the enhancement of Quality of Life in prison is gaining importance (cf. eg. Johnsen, Granheim, & Helgesen, 2011).

Next to prison contexts, the Quality of Life-concept is increasingly being used in forensic psychiatric subpopulations in diverse contexts (van Nieuwenhuizen, Schene, & Koeter, 2002). This relates, for example, to studies about schizophrenia patients in high security forensic settings (Kuokkanen, Aho-Mustonen, Muotka, Lappalainen, & Tiihonen, 2015), studies about the impact of mental disorders on Quality of Life in high security services (Saloppé & Pham, 2007), studies about Quality of Life in long-term forensic psychiatric care (Schel, Bouman, & Bulten, 2015) and studies about Quality of Life in forensic psychiatric outpatients (Bouman et al., 2010).

As far as we are aware of, the framework of Quality of Life has not been applied specifically to older forensic psychiatric patients nor to older convicted prisoners. Yet, although not explicitly based on the Quality of Life paradigm as such, a number of recent publications investigated health and custodial needs of older prisoners (Kingston et al., 2011; Hayes et al., 2012; Hayes et al., 2013a; Davoren et al., 2015). These findings will be shortly described in the next section.

1.8.2 Custodial and healthcare needs of older offenders according to the Quality of Life Domains

Physical health domain of older offenders

Cardiovascular diseases, arthritis and/or back problems, endocrine disorders (e.g. diabetes), and sensory deficits such as vision and hearing problems, are reported to be most common among older offenders in prison (Loeb & AbuDagga, 2006).

Fazel et al. (2001) found that 85% of the older offenders in prison had major illness recorded in their medical notes and that 83% reported a chronic illness at the time of the interview. Moreover, the physical health status of older prisoners appeared significantly worse compared to both younger prisoners as well as older people living in the community (Wangmo et al., 2015). Colsher (1992) found that 42% of the older

offenders described limitations in their physical functioning, but only 11% of them declared to experience limitations in routine self-care activities. However, results on age-related health decline are not univocal: Gallagher (1990), for example, showed that apart from more hearing and visual difficulties, the physical health of older male offenders did not differ significantly from those of their younger peers.

Psychological health domain of older offenders

Nearly all studies on mental health in prison populations consistently indicate that the prevalence of mental disorders is high (Durcan & Zwemstra, 2014). In the U.S., for example, in 2005, 56% of the state prisoners showed indications of mental health problems (e.g. psychiatric hospital stay in the past, use of psychopharmacologic medication, and/or presence of a medical diagnosis). With regard to symptoms of psychiatric disorders during the last 12 months, 24% of the state prisoners had a recent history of mental health problems. Symptoms of mood disorders (depression and mania) were most prevalent, followed by delusions and hallucinations (James & Glaze, 2006). Andersen (2004) reviewed 23 studies on the mental health in prison populations worldwide and reported the prevalence of psychiatric disorders in sentenced European prisoners to range from 37 to 57%. Similar to findings in the physical domain, there are some mixed findings as well: Gal (2002), for example, indicated that feelings of depression were higher among younger prisoners as compared to older prisoners, whereas other studies indicated the opposite (Davoren et al., 2015).

Domain of social relationships of older offenders

It is generally accepted that incarceration leads to isolation and a considerable reduction of social relationships for most prisoners. Already in 1958, Sykes (as cited in Dobbs & Waid, 2004 p. 1) described the "pains of imprisonment": the loss or deprivation of liberty, the loss or deprivation of goods and services, the loss or deprivation of heterosexual relationships, the loss or deprivation of autonomy, and the loss or deprivation of security, which formed the basis for what later would be called as the deprivation model. Further, Dobbs & Waid (2004) mentioned that the least prisonized prisoners conduct well, have shorter sentences, have stable personalities, and maintain strong relationships with people in the community and other prisoners[4]. On the other hand, prisoners with long terms of incarceration, unstable personalities, who lack relationships and who are unconducive to proper adjustment tend to be most prisonized.

Domain of Environment (prison) of older offenders

Older offenders may become targets of prison violence and abuse by younger offenders

4 Clemmer developed the theory of "prisonization" in 1958, according to which prisoners go through a process of assimilation: they develop a high degree of loyalty towards their fellow-prisoners and a strong feeling of opposition towards the prison staff, who are seen as surrogates for the society that has rejected them. In the long-term, prisonization may lead to depression. Lon-germ imprisonment is associated with apathy, emotional instability, personality disorders, cognitive impairment and premature onset of mental deterioration,incapability to cope with daily life, introversion and increased aggressive behavior (Dettbarn, 2012, p. 236)..

due to their physical frailty and lack of ability to defend themselves. Especially first-time older offenders seem more vulnerable towards victimization (Williams & Abraldes, 2007). Kerbs and Jolley (2007) reported that psychological and property victimization towards older offenders were most prevalent, whereas physical and sexual victimization were rather uncommon. Yet, results about inmate-on-inmate victimization towards older offenders shows conflicting and contradictory results. Smith (as cited in Kerbs and Jolley, 2007), suggested that long-term offenders are less likely to be victimized compared to younger offenders, because they have experience in avoiding victimization. Older offenders who spent many years (sometimes decades) in prison might continue to experience the effects of the total institution which is characterized by the monotony of the prison lifestyle, resulting in apathy, decreasing motivation and dependency on routine. The strict regime imposing daily routines such as waking up at the same time every day, food that is delivered prepared to the cell, and showering at fixed times may lead to the fact that long-term prisoners lack essential capabilities in order to resettle in the community (Davies, 2011).

1.8.3 Valid instruments to measure the Quality of Life of older offenders

As mentioned earlier, Fitzpatrick and colleagues (2010) retained Quality of Life as one of the outcome indicators for forensic psychiatric treatment, besides the more obvious indicators such as risk for recidivism. However, measuring the Quality of Life of older offenders is subject to a number of limitations: generic Quality of Life instruments are often not applicable (e.g. because these refer to issues that are not relevant for persons in residential services such as taking public transport), and there is a lack of specific instruments, especially those that are suitable for both convicted offenders as well as forensic psychiatric patients (van Nieuwenhuizen et al., 2002). Therefore, we used the WHOQOL-BREF, a widely used generic Quality of Life instrument that can be applied irrespective of living context. The WHOQOL-BREF has been validated for several populations, including prisoners (Mooney, Hannon, Barry, Friel, & Kelleher, 2002), forensic inpatients (Saloppé & Pham 2006), mental health psychiatric outpatients (Trompenaars et al. 2005) and older people (Hwang et al., 2003).
In the WHOQOL-BREF, four domains of Quality of Life are distinguished: (1) physical health; (2) psychological health; (3) social relationships; and (4) environment. The WHOQOL-BREF instrument (consisting of 26 items) measures Quality of Life in four subdomains (1) Physical Health – 7 items; (2) Psychological – 6 items; (3) Social relationships – 3 items; and (4) Environment – 8 items. Two additional general items are scored separately. In this study, the latter have not been taken into account. Originally the WHOQOL-BREF is used as a paper and pencil instrument filled out by the respondent. In this study, however, interviewers have read out all items and scored the answers. The instrument and the instructions of the WHOQOL-BREF are available online at http://www.who.int/mental_health/media/en/76.pdf.

1.9 Gerontological framework

The notion of successful ageing has been frequently used to study the interaction of ageing in specific subpopulations or in relation to specific aspects of life. Essentially, successful ageing studies are consistently related to what contributes to a good (quality of) life. This may include research on the association of individual personality traits and successful aging (Baek, Martin, Siegler, Davey, & Poon, 2016), successful aging and life satisfaction (Arrindell, van Nieuwenhuizen, & Luteijn, 2001), and successful aging and poverty (Olivera & Tournier, 2016).

Although the theoretical concept of successful aging is well-known in geriatric and gerontological sciences (Bowling, 2005), it seems applicable to enhance the level of Quality of Life in aging prison- and forensic populations as well. However, there exists little agreement on the conceptualization of the notion of successful aging. A recent review study revealed 105 different operational definitions and 84 unique models (Cosco, Prina, Perales, Stephan, & Brayne, 2014). Besides the vagueness in the concept, successful aging has been criticized because it inherently reduces aging to an individual responsibility in which the degree of adaptation to the process of growing old can be attributed to individual decisions and personal efforts. Accordingly, the concept of successful aging ignores the inequalities in disadvantaged groups (Lamb, 2014). In fact, successful aging seems to focus on the "fit" and healthy people and deepens the social depreciation of those who never have been able to be successful or those who are no longer able to realize a successful life at an old age (Dillaway & Byrnes, 2009). Therefore, Martinson and Berridge (2015) suggest that more reflexivity about of the use of successful aging and other normative models in gerontology is warranted.

In this respect, social gerontology could offer a more valuable theoretical framework to look at aging in prison/forensic populations. Social gerontology is considered as a science-based but practice-oriented sub-discipline of gerontology (Kricheldorff, Aner, Himmelsbach, & Thiesemann, 2015). Kricheldorff and colleagues (2015) state that social gerontology particularly focuses on social relationships in old age, social participation of old people and the protection of their individual needs. Self-determination and autonomy are important values of this theory. Essential themes in social gerontology are Quality of Life and life satisfaction from the perspective of personal capacities, the importance of events during the life course and the actual living conditions. Social gerontology helps to better understand older people's health-seeking behaviors and it supports the improvement of communication and more personalized interaction with older patients (Tinker, Hussain, D'Cruz, Tai, & Zaidman, 2016).

1.10 Recovery

The basic premise of recovery is to support the efforts of the client to regain control over his or her life (Anthony, Rogers, & Farkas, 2003). Recovery principles have become increasingly prominent in the field of mental health care. The recovery-oriented

approach is relevant for the present dissertation as the concept incorporates several key elements of the Good Lives Model as well as of the Quality of Life paradigm.
Recovery is increasingly considered as a paradigm shift in institutional care, forensic care and custodial care since it aims at a more holistic approach than the traditional medical model (McKenna, Furness, Dhital, Park, & Connally, 2014). For example, feelings of safety and security as well as the presence of interpersonal support are seen as basic conditions in the forensic recovery process (Shepherd, Doyle, Sanders, & Shaw, 2016). It has been argued that aiming at opportunities for forensic psychiatric patients to develop a sense of self and connectedness could help improve recovery (Clarke, Lumbard, Sambrook, & Kerr, 2016).
Whereas in traditional treatment, the focus is placed on clinical recovery or symptom reduction; the recovery approach advocates empowering individuals to overcome a range of challenges associated with mental illness, such as social isolation, loss of valued living to pursue life goals in the presence or absence of symptoms (Clarke et al., 2016).
The concept of recovery has been applied to and studied in prison settings as well. For example in order to reduce substance-related offending and recidivism, continuity of care post-release programs have been evaluated with Quality of Life as outcome measure (Elison, Weston, Davies, Dugdale, & Ward, 2016). Furthermore, the contribution of abstinence-supporting social networks of ex-offenders in the recovery process has been evaluated (Stone, Jason, Stevens, & Light, 2014). As far as we are aware of, recovery in gerontological studies is mostly implemented at the functional level of recovery. In geriatrics and gerontology, recovery processes are usually considered from a rehabilitation perspective in which age-related health issues are stressed. This includes studies on hip fractures (Javier Ortiz-Alonso et al., 2012), cardiac rehabilitation (Giallauria et al., 2006) and recovery after medical treatment in hospital. All of these age-related concerns are applicable to older prisoners during incarceration and after release (Loeb & AbuDagga, 2006).

1.11 Research framework

In this dissertation, the Flemish population of older offenders is focused on. Special attention is given to variables that can be linked to the four WHO-Quality of Life domains: (1) physical; (2) psychological; (3) environmental; and (4) social domain. According to the principles of social gerontology, interactions between older offenders, the social context, and their living situation (e.g., in prison or in the community), are investigated. In line with the strengths-based approach inherent to the GLM, the primary goods and related factors relevant to the Quality of Life of older prisoners are studied in addition to more criminological (risk-oriented) and mental health characteristics.
As far as we know, this study is the first to specifically apply the GLM-model on older offenders.

The three main research questions in this dissertation are:

1. What are the characteristics of older offenders in Flanders (RQ1)?
2. Which variables influence the Quality of Life of older imprisoned offenders (RQ2)?
3. Which (care) trajectories older forensic psychiatric patients have passed through during lifetime (RQ3)?

Data were collected according to the principles of the **mixed method research approach** as described in Johnson and Onwuegbuzie (2004) using four different research methods: (1) a literature study; (2) a retrospective case note study; (3) a structured interview including the administration of standardized instruments; and (4) in-depth interviews.

In relation to RQ1, the characteristics of older forensic psychiatric patients *first* were studied by means of a literature study (study 1). *Secondly*, based on a retrospective case not study, we explored demographic-, age-related-, criminological- and health care aspects (study 2). *Thirdly*, we studied older prisoners' characteristics with regard to physical, psychological, social and environmental Quality of Life domains by interviewing 110 older prisoners. An instrument was developed to capture demographic data relating to the prison experience and background of the participants, supplemented with five standardized instruments on (1) Quality of Life by the World Health Organization Quality of Life assessment (short version), WHOQOL-BREF (Skevington et al., 2004); (2) age-related frailty by the Tilburg Frailty Indicator, TFI (Gobbens, Assen, Luijkx, & Schols, 2012); (3) mental health problems by the Mini International Neuropsychiatric Interview, M.I.N.I. version 5.0.0 DSM-IV (Sheehan & Lecrubier, 2006); (4) loneliness, by the De Jong-Gierveld Loneliness Scale (De Jong Gierveld & Tilburg, 2010); and (5) cognitive functioning by the Montreal Cognitive Assessment, MoCA (2015) (study 3).

In relation to RQ2, we aimed to investigate which factors are related to the Quality of Life of older prisoners. Characteristics were categorized according to the three basic areas 'body' 'self' and 'social life' to achieve a 'good life' (Ward, 2002) and their relationship with the different QoL-domains was investigated (study 4).

In relation to RQ3, open interviews were carried out in order to grasp how older forensic psychiatric patients personally perceived the care trajectories during their lifetime (study 5).

Figure 1 shows a schematic overview of the research questions in this dissertation in relation to the legal statute of the older offender (forensic psychiatric patient or convicted offender and the place of residence in- or outside prison).

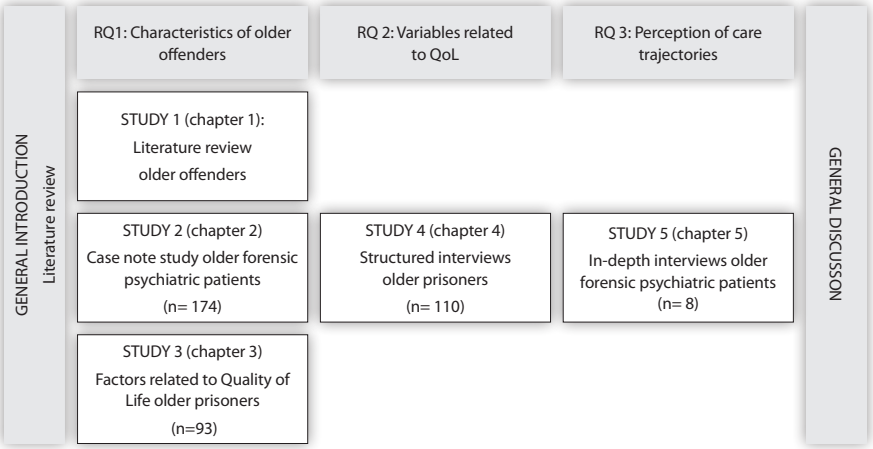

Figure 1 Schematic overview of research questions and studies

1.12 Structure of the dissertation

Apart from the general discussion, the chapters in this dissertation are based on papers published in or submitted to international peer-reviewed scientific journals. Because these articles have been written as self-containing papers, it should be noticed that some overlap, mainly in the introductory section of each chapter may exist. This dissertation is based on 5 peer reviewed papers of which those in chapter 1, 2 and 5 have been published whereas those that correspond to chapter 3 and 5 are currently under review.

C*hapter 1,* the general introduction is (partly) based on an international literature review (study 1) about the characteristics of older offenders. Furthermore, terminology, definitions and theoretical concepts used in this PhD project are specified.
In *chapter 2*, based on a retrospective case note study (study 2), the characteristics of older offenders deemed criminally irresponsible in Flanders are explored. Differences between incarcerated against non-incarcerated offenders are investigated.
In *chapter 3,* grounded on the principles of the GLM, it was examined to what extent factors allied to human needs ("primary goods") discerned in the Good Lives Model are related to the four Quality of Life domains of older prisoners: physical domain, psychological domain, social domain and the environmental domain (study 3).
Chapter 4 investigates physical, psychological, social and environmental domains of the Quality of Life of imprisoned offenders in Flanders (study 4).
Chapter 5 reports on the results of a qualitative study (open interviews) of older criminally irresponsible offenders the care trajectories since their first conviction were investigated (study 5).
Chapter 6 ends up with an overview of the main findings, a general discussion, limitations and suggestions for future research.

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Chapter 2

Older offenders deemed criminally irresponsible in Flanders (Belgium)

Based on: De Smet, S., De Keyzer, W., De Donder, L., Ryan, D., Verté, D., Broekaert, E. & *Vandevelde, S.* (2016). Older offenders deemed criminally irresponsible in Flanders (Belgium): Descriptive results from a retrospective case note study. *International Journal of Law and Psychiatry*, 46, 35-41.

Abstract

Introduction: In Belgium, offenders who are deemed criminally irresponsible for their criminal actions because of mental illness or intellectual disability are subject to a specific safety measure with the dual objective of protecting society and providing mandated care to the offender. While Belgian law requires that offenders who are deemed criminally irresponsible should be in a hospital, clinic or other appropriate institution outside of prison, in practice about one third of all such offenders still reside in prison. Whether imprisoned or living in settings outside prison, there is a dearth of knowledge on the characteristics of the aging population among the criminally irresponsible offenders.

Objective: This paper aimed to explore the characteristics of older offenders categorized as criminally irresponsible in Flanders (northern Belgium) with a focus on the differences between imprisoned older offenders deemed criminally irresponsible and their peers who are residing outside prison.

Method: A retrospective case note study of all offenders deemed criminally irresponsible, $\geq$ 60 years of age (n=174), was conducted in the four Commissions of Social Defense, which implement the procedure in the case of those deemed criminally irresponsible in Flanders. The files were screened for (1) demographic characteristics, (2) criminal history as well as (3) mental and physical health issues.

Results: One-fourth of the population were $\geq$ 70 years of age. 30.5% were in prison. Compared to their non-imprisoned peers, the imprisoned offenders had a history of having committed more serious violent crimes towards persons, such as homicides and sexual crimes. In addition, imprisoned older offenders categorized as criminally irresponsible are characterized more explicitly by personality traits that are likely to reduce their chances of being transferred to more appropriate settings in the community.

I**mplications**: A comprehensive and systematic screening of all older offenders deemed criminally irresponsible with regard to health needs and social functioning, including age-related deterioration, alcoholism, and other causes of social disadvantages, is warranted to detect potentially hidden problems.

2.1 Introduction

A heightened interest in the aging of offenders has been noted in many Western countries, mainly because of the high costs associated with age-related health care among the growing population of older prisoners (Chiu, 2010). The increase of imprisoned older offenders may be partly explained by the aging of society, but may also have been exacerbated by the excessive use of punitive sentencing practices in the past, e.g., 'the three strikes and you are out law' in the USA (Fellner, 2012). Although there is a noticeable difference in the growth of the population between the USA (16.5% $\geq$ 50 years of age, according to Kim & Peterson, 2014) and most other Western countries [e.g., 10% in UK (House of Commons Justice Committee, 2013)], aging in prisons is an increasing concern (Aday, 2013).

Consequently, correctional systems are challenged to address age-related problems, such as dementia (Maschi, Morgen, Zgoba, Courtney, & Ristow, 2011), and other needs, such as age appropriate accommodation and social isolation (Hayes, Burns, Turnbull, & Shaw, 2013).

Internationally, most contemporary legal systems incorporate the principle of "*legal insanity*" for offenders diagnosed with mental disorders (Kalis & Meynen, 2014). According to this principle, offenders should be provided with appropriate care where they are either unable, or can only to a certain degree, be held criminally responsible for their offences (Penney, Morgan, & Simpson, 2013).

In this context, the Belgian law applies a dichotomized model in which offenders are considered either fully responsible or fully irresponsible for their criminal acts (Protais, 2014). In cases where individuals have the legal capacity to be responsible for their crimes, offenders can be found guilty by a judge or court and in such cases are subjected to a sentence, which is – in case of imprisonment – predetermined in time. On the other hand, criminal offenders who are evaluated by an expert-psychiatrist during the investigation process and found to be criminally irresponsible become subject to the so called "measure of internment", which is indeterminate in time (Vandevelde, Soyez, Vander Beken, De Smet, Boers & Broekaert, 2011). This judicial measure is aimed (1) at safeguarding society against dangerous offenders and – at the same time – (2) at treating the offenders who are considered as patients or as persons who should be supported, due to mental illness or intellectual disabilities (Van Assche, 2013). Up until now, the Commission of Social Defense (CSD) is responsible for the implementation and evaluation of the measure which means that it is the Commission's prerogative to decide on where the offender is referred to (Cosyns, 2005). The CSD also decides on the duration and termination of the measure, based on an evaluation of the 'social dangerousness' of the individual and an improvement in the condition (e.g. the psychiatric illness) on which the measure is based (Vandevelde et al., 2011). Given the insufficient capacity of (forensic) care facilities in Belgium, many offenders deemed criminally irresponsible are sent to prison, often without substantial care provision (Vandevelde et. al., 2011). In 2011, 28.3% (n= 1,158) of all Belgian offenders deemed criminally irresponsible (n= 4093) were imprisoned in regular prisons (Moens & Pauwelyn, 2012). Furthermore, 45.2% (n=2,255) of the offenders deemed criminally irresponsible were managed within probation services, either living

independently at home, or in other services such as specialized forensic units, regular mental health care settings or facilities for people with intellectual disabilities (Moens & Pauwelyn, 2012). Because of the precarious living conditions of imprisoned offenders deemed criminally irresponsible and the expectation that care provision outside prisons could not be created in a short amount of time, imprisoned offenders deemed criminally irresponsible have been separated in most prisons from the other prisoners and since 2007 they have been looked after by small multidisciplinary care teams. However, it cannot be ignored that these care teams are seriously understaffed in number and are only capable of dealing with the most immediate and basic care needs. Despite some additional initiatives that have been undertaken in some prisons e.g. for those with intellectual disabilities (Vanden Hende, Caris & De Block-Bury, (2005), the overall situation of those offenders deemed criminally irresponsible accommodated in prison still remains at a substandard level; a situation for which Belgium has repeatedly been criticized by the European Court of Human Rights (ECHR).

At the time of the present study (2011), the Flemish population (the Dutch-speaking part of Belgium) of offenders deemed criminally irresponsible numbered 1962 (Moens & Pauwelyn, 2012), of whom 8.9% were > 60 years of age (n=174). The main aim of the present study is to describe the situation of older offenders deemed criminally irresponsible in Flanders with respect to (1) demographic characteristics; (2) crime history; and (3) mental and physical health issues. As a substantial number of offenders deemed criminally irresponsible reside in prison and because a prison environment is not considered to be the most suitable environment for treatment, we have compared these characteristics for imprisoned offenders deemed criminally irresponsible and their non-imprisoned counterparts. As this is – to our knowledge – one of the first studies that tackles this question, the article reports on information that has not been available up until now. In the discussion, we will reflect on the most pertinent findings, and make recommendations on how meeting the dual mandate which requires the provision of appropriate care to older criminally irresponsible offenders, while simultaneously protecting society, could be more optimally delivered in Belgium and internationally. Specific attention will be given to what we could learn from the differences between imprisoned and non-imprisoned older criminally irresponsible offenders.

2.2 Method

2.2.1 Setting and participants

A retrospective case note study of older offenders deemed criminally irresponsible was conducted in the four CSDs in Flanders, which are established in the regional cities of Ghent, Brussels, Antwerp, and Leuven. The Commissions' secretariats manage the files in which information from various sources is recorded, e.g., compliance with probation rules, periodic social reports, police reports, observation reports, psychological reports, and notifications of transfers or absence without permission. The CSD takes all judicial

decisions concerning alterations in the probation rules, changes in the care trajectory, and if applicable, cessation of the status of criminal irresponsibility based on these files. The inclusion criteria for the study were as follows: 1) case files of persons subjected to the measure of legal insanity at the time of the study; and 2) those $\geq$ 60 years of age.

2.2.2 Procedure and instruments

Since there is no central data management system across the four CSDs in Flanders, the relevant files were manually extracted from the case files in each of the four CSD secretariats. Between December 2010 and January 2011, the files of all 174 offenders deemed criminally irresponsible $\geq$ 60 years of age were identified. A codebook of 112 items was created comprising socio-demographic characteristics, criminal history factors, and psychiatric as well as the physical health issues of the offenders. The codebook was digitalized using Snap survey software (Snapsurveys, London, UK - version Snap 10 Professional, 2014). Although Snap is primarily intended as an online web application, it was used in this study as a standalone data input system on a laptop. The digital inputting of data was carried out on site by the first author. This procedure enabled a congruent and uniform process of data collection and any chances of input errors were minimized.

2.2.3 Data analysis

Descriptive statistics (frequencies and crosstabs) were applied to map the characteristics of the older offenders deemed criminally irresponsible. Chi-square statistics were used to evaluate the differences between older imprisoned and non-imprisoned offenders deemed criminally irresponsible at a bivariate level. All analyses were performed in SPSS 20.0 using a statistical significance threshold of $p<0.05$. In the results section of this paper, statistically significant results have been indicated in the tables by the symbol * .

2.2.4 Ethical considerations

Ethical approval (B.U.N. 14320109752) from the Ethics Committee of the University Hospital of the Vrije Universiteit Brussel (Free University of Brussels) was obtained, as well as authorization from the Belgian Federal Public Service for Justice to conduct the study. Only the first author had access to the records and data were analyzed confidentially and reported anonymously.

2.3 Results

2.3.1 Demographic characteristics

Of the 174 offenders in this study, sixty-eight (39.0%) were accommodated in institutional care facilities outside of prison settings, of whom 55.7% (n=37) were in

specialized geriatric facilities and 45.3% (n=31) were in mental health care. Nearly one-third of the offenders (30.5% [n= 53]) were still imprisoned and 29.9% (n= 52) lived at home. In one case, the current place of residence was unclear.

In Table 1, the demographic characteristics of older offenders deemed criminally irresponsible are summarized. The population was mainly male (90.1%), with a mean age of approximately 67 years. Most of the older offenders deemed criminally irresponsible were of Belgian nationality (95.9%). The majority were poorly educated; indeed, > 50% of the offenders had only completed a primary education. Moreover, in 29.9% of the files, functional illiteracy and/or problems in calculating were reported. None of the differences between IOs and NIOs were statistically significant in Table 1.

Table 1. Demographic characteristics of older imprisoned (IOs) and non-imprisoned offenders deemed criminally irresponsible (NIOs)

		IO		NIO		Total	
		%	N	%	N	%	N
			53		110		173
Age	60–69 years	77.4	41	74.2	89	75.1	130
	70–79 years	20.8	11	20	24	20.2	35
	80 years of age and older	1.9	1	5.8	7	4.6	8
Gender	Female	5.7	3	11.7	14	9.9	17
	Male	94.3	50	88.3	106	90.1	156
Nationality	Belgian	92.5	49	95.8	115	94.8	164
	Other	5.7	3	3.3	4	4.0	7
	Unknown	1.9	1	0.8	1	1.2	2
Marital status	Married	7.5	4	20.8	25	16.8	29
	Never married	43.4	23	33.3	40	36.4	63
	Divorced	39.6	21	35.0	42	36.4	63
	Widowed	3.8	2	8.3	10	6.9	12
	Other	0	0	3.8	2	1.2	2
	Unknown	5.7	3	0.8	1	2.9	4
Highest level of education	Primary education	56.6	30	56.7	68	56.6	98
	Secondary education	35.8	19	24.2	29	27.7	48
	Higher education	3.8	2	9.2	11	7.5	13
	Adult education	0	0	5	6	3.5	6
	Unknown	3.8	2	5	6	4.6	8
Employment	Skilled employment	42.2	19	43.6	48	43.2	67
	Unskilled employment	51.1	23	46.4	51	47.7	74
	Executive / higher management	4.4	2	6.4	7	5.1	9
	Army	2.2	1	3.6	4	2.9	5
	Other	0	0	1.8	2	1.3	2

* $p<0.05$

Table 2 shows the negative life events experienced by older offenders deemed criminally irresponsible. Only the prevalence rates of $\geq$ 10% are shown. Generally, it appears that about three in four of the older offenders deemed criminally irresponsible experienced

physically or mentally threatening living conditions at a young age (< 18 years). Psychological violence and neglect, physical violence, domestic violence within the family, and alcoholism of the parents was prevalent in at least one-fifth of the cases. More than one in three of the sample had at least one period in institutional care during childhood.

Table 2. Negative life events experienced by older imprisoned (IOs) and non-imprisoned criminally irresponsible offenders (NIOs)

	IO		NIO		Total	
	%	N	%	N	%	N
Negative life experiences (<18 years)		53		116		169
No obvious negative life experiences reported	22.6	12	25	29	24.3	41
Psychological neglect	30.2	16	19.8	23	23.1	39
Physical violence	26.4	14	19.8	23	21.9	37
Domestic violence – many conflicts	22.6	12	20.7	24	21.3	36
Alcoholism – parents	18.9	10	20.8	25	20.2	35
Sexual abuse	13.2	7	15.5	18	14.7	25
Sexual abuse by others	7.5	4	11.2	13	10.0	17
Sexual abuse by own parents	5.7	3	4.3	5	4.7	8
Repression of the child	15.1	8	14.7	17	14.7	25
Death of one or both parents	13.2	7	14.7	17	14.1	24
Physical neglect	11.3	6	12.1	14	11.8	20
Unknown/unreliable reporting	17	9	8.6	10	11.2	19
Psychiatric illnesses involving parents	11.3	6	10.3	12	10.6	18
Psychiatric illnesses involving siblings	7.5	4	12.1	14	10.6	18
Child labor	9.4	5	10.3	12	10.0	17
Institutions during childhood (<18 years)						
No history of institutional admissions	60.4	32	70.9	83	67.6	115
Institution for special youth care	13.2	7	10.3	12	11.2	19
Boarding school	11.3	6	11.1	13	11.2	19
Reformatory school	11.3	6	6	7	7.6	13
Unknown	11.3	6	6	7	7.6	13
Child and adolescent psychiatry	7.5	4	6.8	8	7.1	12
Adult psychiatry	3.8	2	6	7	5.3	9
Service for persons with a disability	7.5	4	4.3	5	5.3	9

* $p<0.05$

With respect to negative life events, no statistically significant differences emerged between IOs and NIOs. Nevertheless it seems that IOs experienced more psychological neglect (IO, 30.2% vs. NIO, 19.8%) and had a more substantial history of institutional admissions than NIOs (IO, 39.6% vs. NIO, 29.1%).

Crime History

Table 3 presents an overview of offences committed at least once during the lifetime of these offenders. Sexual offences were the most prevalent, with approximately 55.5% of all older offenders deemed criminally irresponsible having committed rape and violent sexual offences and approximately 38.2% having a history of indecent assault without

violence at least once in their lifetime. Minors were the most prevalent victims. Within the sample, 31.2% committed at least one sexual offence against minors they knew, 27.2% committed at least one offence against minors who they did not know, and 16.2% committed a sexual crime against a minor in their own family.

In nearly 13% of the cases, unequivocal references to delinquency under 18 years of age were found in the case files. Within the sample, 63.2% already had a criminal record before the current measure legal insanity, including 26.4% who had been the subject of at least one other measure of legal insanity previously. The mean duration of the current measure of legal insanity was 13.7 years (SD = 11.9 years, median = 10.4 years, minimum = 0.0 years, and maximum = 44.7 years).

The mean age at the first conviction was 40.1 years (SD, 13.8 years, median, 39.0 years, minimum 16.0 years, and maximum = 85.0 years). 35.1% were $\geq$ 50 years of age when they were convicted for the first time. The proportion of first-time offenders > 60 years of age was 16.7% and 2.9% for those $\geq$ 70 years of age.

Recidivism seemed to be a feature of the cohort, in that several of the cohort continued to commit crimes at an older age; specifically, 33.1% of the sample were condemned for new offences when they were between 50 and 61 years of age, with approximately 25.6% condemned for new offences when they were > 60 years of age.

Table 3. Offences committed at least once during lifetime by older imprisoned (IOs) and non-imprisoned criminal irresponsible offenders (NIOs)

	IO		NIO		Total	
	%	N	%	N	%	N
		53		120		173
Rape and indecent assault by violence*	81.1	43	44.2	53	55.5	96
Theft	52.8	28	41.7	50	45.1	78
Indecent assault and sexual offences without violence	45.3	24	35.0	42	38.2	66
Battery and violence to persons	43.4	23	29.2	35	33.5	58
Defamation, slander, and insults	32.1	17	30.0	36	30.6	53
Homicide	24.5	13	16.7	20	19.1	33
Fraud and dishonesty	18.9	10	15.8	19	16.8	29
Attempted homicide*	22.6	12	10.8	13	14.5	25
Destruction or damage to property	13.2	7	11.7	14	12.1	21
Illegal possession of arms	9.4	5	9.2	11	9.2	16
Arson*	17.0	9	5.0	6	5.8	10
Drug-related offences	3.8	2	1.7	2	3.5	6
Type of victim of sexual offences	%	N	%	N	%	N
		53		120		173
Minor, no family, victim known*	47.2	25	24.2	29	31.2	54
Minor, no family, victim unknown	28.3	15	26.7	32	27.2	47
Minor within a family*	28.3	15	10.8	13	16.2	28
Adult, no family, victim known	15.1	8	8.3	10	10.4	18
Adult, no family, victim unknown	17.0	9	7.5	9	10.4	18
Adult within a family*	17.0	9	5.8	7	9.2	16

* $p<0.05$

Older IOs committed sexual offences with violence more often than NIOs (IO, 81.1% vs. NIO, 44.2%); X^2 (1, N = 173) = 20.34, p = .00001., and without violence (IO, 45.3% vs. NIO, 35.0%); X^2 (1, N = 173) = 1.65, p = 0.11, NS). The most striking results concern sexual offences towards minors where the victim was known to the perpetrator (IO, 47.2% vs. NIO, 4.2%); X^2 (1, N = 173) = 9.06 , p = .003. and towards minors within the family (IO, 28.3% vs. NIO, 10.8%); X2 (1, N = 173) = 8,27, p = .004. Those IOs convicted of serious violent crimes were more frequently imprisoned due to battery and violence to persons (IO, 43.4% vs. NIO, 29.2%); X^2 (1, N = 173) = 3.34, p = 0.07, NS, homicide (IO, 24.5% vs. NIO, 16.7%); X^2 (1, N = 173) = 1.47, p = 0.23., NS, and attempted homicide (IO, 22.6% vs. NIO, 10.8%); X^2 (1, N = 173) = 4.15, p = 0.04. than NIOs. Arson was also a more frequently reported crime among IOs (17.0%) than NIOs (5.0%); X^2 (1, N = 173) = 6.66, p = .001.

Health

Physical health

Although not all files contained systematically-recorded information about the health status of the sample, the presence of physical disorders from the past could be retrieved in many cases, e.g., from the reports carried out by psychiatrists or social workers. In Table 4, physical disorders before and after 50 years of age are reported (only prevalence figures > 5% are included). Age-related disorders, such as diabetes, cardiovascular and lung disorders are reported to a greater extent later in life (after 50 years of age), whereas traumatic brain injuries and bone fractures were reported more frequently in those under 50 years of age.

Table 4. Physical health problems of older imprisoned (IOs) and non-imprisoned criminal irresponsible offenders (NIOs)

	< 50 years of age						> 50 years of age					
	IO		NIO		Total		IO		NIO		Total	
	%	N	%	N	%	N	%	N	%	N	%	N
		53		120		173		53		120		173
Diabetes	5.7	3	4.2	5	4.6	8	7.5	4	11.7	14	10.4	18
Epilepsy	7.5	4	5	6	5.8	10	3.8	2	5	6	4.6	8
Brain injury (external trauma)	13.2	7	9.2	11	10.4	18	1.9	1	0	0	0.6	1
Brain damage alcohol/drugs	1.9	1	5	6	4	7	7.5	4	8.3	10	8.1	14
Cardiovascular – cholesterol	5.7	3	0	0	1.7	3	11.3	6	14.2	17	13.3	23
Cardiovascular	1.9	1	1.7	2	1.7	3	7.5	4	8.3	10	8.1	14
Cardiovascular – high blood pressure >50*	3.8	2	3.3	4	3.5	6	11.3	6	24.2	29	20.2	35
Bone fractures <50*	15.1	8	4.2	5	7.5	13	0	0	5.8	7	4.0	7
Respiratory diseases (excl. cancer and tbc)	0	0	2.5	3	1.7	3	3.8	2	8.3	10	6.9	12
Tuberculosis	5.7	3	5	6	5.2	9	0	0	0.8	1	0.6	1

* p<0.05

The number of older criminally irresponsible IOs compared with NIOs was small and did not reveal any statistical significant results. Nevertheless, it appears that older criminally irresponsible IOs experienced somewhat more bone fractures before 50 years of age (IO, 15.1% vs. NIO, 4.2%); X^2 (1, N = 173) =6.32, p= .001. Conversely, hypertension (IO, 11.3% vs. NIO, 24.2%); X^2 (1, N = 173) = 3.76, p = 0.05. NS and lung diseases (IO, 3.8% vs. NIO, 8.3%) N.S. were less frequently among IOs than among NIOs.

Mental health

Currently the judicial classification that applies to offenders deemed criminally irresponsible in Belgium remains based on legislation that dates from the 1930s. As a result, archaic Dutch terminology is still in use nowadays and therefore we had to customize the terminology into the contemporary interpretation of the three categories used (table 5). (1) It appears that the majority (60.9%) of the older offenders deemed criminally irresponsible have been declared criminal irresponsible for 'miscellaneous' reasons, (2) one fifth (21.8%) because of mental illness and (3) one in five (20.7%) due to intellectually disability. Specific definitions of these categories are non-existent according to Van Assche (2013). However, according to Casselman et al. (1997, p.41), the category 'miscellaneous' comprises a heterogeneous group of disorders that lead to 'abnormal aggressive or seriously irresponsible behavior'. In practice, this includes personality disorders, psychopathy, addiction problems, sexual disorders, and psycho-organic disorders. Mental illness refers to the presence of distinct psychiatric disorders that affect the sense of reality, e.g., psychotic disorders with hallucinations and delusions. According to the same authors, intellectual disability is defined by IQ < 70.

In addition to the judicial classification, each expert psychiatric report in the case files included a reference to either a broad typology of problems (e.g. intellectual disability or psychiatric disorder) or a range of manifestations of behaviors or symptoms, which are summarized in Table 5. In the vast majority of cases, specific DSM classifications appeared absent, i.e., in 91.3% and 94.2% of the cases for Axis 1 (main diagnoses, such as depression and schizophrenia) and Axis 2 (personality disorders, such as borderline personality disorder or antisocial personality disorder), respectively. Instead, psychiatric manifestations were described in a non-standardized jargon as presented in Table 5 (i.e., mental health problems and personality traits and behaviors).

Table 5. Psychiatric characteristics of older imprisoned (IOs) and non-imprisoned offenders deemed criminally irresponsible (NIOs)

	IO		NIO		Total	
	%	N	%	N	%	N
Judicial classification legal insanity		51		116		167
Intellectual disability (IQ < 70)	21.6	11	21.6	25	20.7	36
Psychiatric illnesses	15.7	8	25.0	29	21.8	37
Miscellaneous	62.7	32	53.4	62	60.9	94
Mental health problems		51		113		164
Psychotic disorders	47.1	24	48.7	55	48.2	79
Alcoholism	23.5	12	28.3	32	26.8	44
Sexual disorders	29.4	15	16.8	19	20.7	34
Personality disorders ([1])	23.5	12	12.4	14	15.2	25
Psychopathy*	23.5	12	7.1	8	12.2	20
No specific psychiatric disorder described	11.8	6	12.4	14	12.2	20
Brain damage by substance abuse*	17.6	9	7.1	8	10.4	17
Others	7.8	4	11.5	13	10.4	17
Mood disorders	5.9	3	10.6	12	9.1	15
Brain damage by accident	9.8	5	5.3	6	6.7	11
Dementia	0.0	0	4.4	5	2.4	4
Number of diagnoses		51		113		164
1	45.1	23	53.1	60	50.6	83
2 or more	54.9	28	46.9	53	49.4	81
Personality traits and behavior		53		120		173
Poor self-insight*	86.8	46	67.5	81	74.0	128
Impulsive behavior and tempers	64.2	34	53.3	64	56.6	98
Lack of remorse*	71.7	38	42.5	51	51.4	89
Paranoid thoughts	35.8	19	39.2	47	38.2	66
Poor social skills	45.3	24	32.5	39	36.4	63
Immature behavior*	47.2	25	30.8	37	35.8	62
Over assessing own abilities	35.8	19	32.5	39	33.5	58
Lack of empathy*	45.3	24	26.7	32	32.4	56
Sexual disinhibited behavior	37.7	20	29.2	35	31.8	55
Aggression – verbal	39.6	21	25.0	30	29.5	51
Egoistic attitude*	39.6	21	23.3	28	28.3	49
Aggression – physical*	39.6	21	21.7	26	27.2	47
Manipulative behavior*	37.7	20	21.7	26	26.6	46
Lack of responsibility*	37.7	20	21.7	26	26.6	46
Histrionic – demanding behavior	28.3	15	25.0	30	26.0	45
Provocative behavior*	37.7	20	20.8	25	26.0	45
Easily influenced by others	22.6	12	20.0	24	20.8	36
Emotional insensitivity	26.4	14	15.8	19	19.1	33
Disinhibited behavior	20.8	11	15.8	19	17.3	30

(1) Other than psychopathy and other than personality disorders with psychotic symptoms

* $p<0.05$

Psychotic disorders appear to affect nearly half of the older offenders deemed criminally irresponsible. Alcoholism was diagnosed in one-fourth of the sample and brain damage by substance abuse in one of ten older offenders deemed criminally irresponsible. Alcoholism, as a psychiatric illness, has been reported far less frequently compared to the problematic ever-use of alcohol, which occurred in 60.3% of the cases. In contrast, the misuse or abuse of illegal substances was much lower. The three highest rates that could be retrieved were 4.6% for cannabis, followed by 3.6% for illegal sedative drugs (e.g. heroin), and 2.9% for illegal stimulant drugs (e.g. cocaine, amphetamines). Sexual disorders were diagnosed in one-fifth of the cases. Approximately half of the older offenders deemed criminally irresponsible were diagnosed with two or more comorbid psychiatric conditions.

Most expert psychiatric reports also contained descriptions of personality traits which characterize the daily functioning at the time of the psychiatric assessment of those in the sample. Poor self-insight and impulsive behavior were the two most prevalent characteristics (Table 5). It also became apparent from the additional notes that in nearly one in five cases (17.8%) that initially reported negative personality traits and problematic behavior from the past, these manifestations had become milder over time.

In terms of mental health problems, older criminally irresponsible IOs were more commonly diagnosed with sexual disorders (IO, 28.8% vs. NIO, 15.8%); X^2 (1, N = 164) = 3.39, p = 0 .07, NS, personality disorders (IO, 23.1% vs. NIO, 11.8%); X^2 (1, N = 164) = 3.27, p = 0.07. NS., psychopathy (IO, 23.1% vs. NIO, 6.7%); X^2 (1, N = 164) = 8.88, p = 0.003. and brain damage by substance abuse (IO, 17.6% vs. NIO, 7.1%); X^2 (1, N = 164) = 4.22, p = 0.04. than NIOs.

For all items, older IOs were more frequently described as having negative personality traits and behaviors than NIOs. For example, having lack of empathy (IO, 45.3% vs. NIO, 26.7%); X^2 (1, N = 173) = 5.82, p = 0.02. and a lack of remorse (IO, 71.7% vs. NIO, 42.5%); X^2 (1, N = 173) = 12.55, p = 0.0004., verbal aggression (IO, 39.6% vs. NIO 25.0%); X^2 (1, N = 173) = 3.78, p = 0.051. NS. and physical aggression (IO, 39.6 vs. NIO, 21.7); X^2 (1, N = 173) = 5.99, p = 0.01.

2.3.2 Discussion

This study indicates that older offenders deemed criminally irresponsible can be considered as a heterogeneous population in many respects. Importantly, it was observed that one-third of the older offenders deemed criminally irresponsible were still accommodated in a prison setting where the provision of mental health care is often inadequate. Notwithstanding the descriptive design, this study revealed a number of differences between older imprisoned and non-imprisoned offenders deemed criminally irresponsible. Firstly, according to our results about the nature of offences committed at least once in lifetime, the population of older imprisoned offenders deemed criminally irresponsible was represented to a higher extent compared to non-imprisoned peers in each category. The most striking differences are related to the serious violent crimes

towards others, such as homicides and sexual crimes. This discrepancy between groups may be explained by the fact that in Flanders no forensic care facilities for high-risk offenders existed at the time of this study. High-risk offenders are often not accepted in forensic care based on exclusion criteria that include psychopathy, sexual disorders, and/or sexual crimes, psycho-organic disorders, serious addiction problems, poor self-insight, and poor cognitive abilities (Baetens, 2014).
Our results indicate that most of these exclusion criteria match with characteristics that are more prevalent in the imprisoned population of older offenders deemed criminally irresponsible. Consequently, we may assume that not only the lack of available places, but also non-corresponding client profiles reduce the treatment opportunities for older mentally ill offenders.

Demographic characteristics

Nearly 40% of the older offenders deemed criminally irresponsible were accommodated in institutional care facilities outside prisons. These facilities represent a broad variation in types of services and facilities, each with their own identity and treatment objectives. In fact, this diversity of care facilities for offenders deemed criminally irresponsible reflects the overall situation of disjointed care for forensic patients in the Flemish region, which has been described previously by Boers et al. (2011) as 'forensic care on small isolated islands'.

Only one-fourth of the older offenders deemed criminally irresponsible were > 70 years of age, which raises the question about how the most appropriate age threshold of 'the older offender' should be defined. Age cut-offs in other publications range from 45 to 70 years, or even higher (Aday, 2005; Gallagher, 2001; Howse, 2003; Kleinspehn-Ammerlahn, Kotter-Grühn, & Smith, 2008). Researchers in favor of using lower age thresholds refer to the consequences of a harsher lifestyle characterized by a lifetime of adverse events, e.g., substance abuse, malnutrition, and unhealthy housing. This is also referred to as 'early aging' or 'accelerated aging' (Price, 2006). However, Gallagher (2001) stated that there is no empirical evidence for the generalizability of such acceleration in aging for all older offenders. Similarly, Oei & Bleeker (2003) argued that functional deterioration from a geriatric perspective usually starts to manifest fully only during the later years of life. Whether or not accelerated aging is generally present in our research population cannot be concluded directly from our results.

Criminal characteristics

One-half of the older offenders deemed criminally irresponsible in this study had a history of at least one sexual offence and a quarter had been diagnosed with a sexual disorder. These were primarily offences committed against minors and one-fifth had committed homicides. In the main, this appears consistent with findings from Aday (2003), who stated that the majority of older males in state prisons are imprisoned for murder and sexual crimes. Fazel and Grann (2002) reported that among (new) offenders

deemed criminally irresponsible > 60 years of age, 25.7% and 22.9% had committed sexual offences and homicides, respectively. We found that one-third of the older offenders deemed criminally irresponsible had committed their first crime after the age of 50 years, whereas Wahidin & Aday (2010) cited in Aday (2013) found that nearly one-half of the older imprisoned offenders (≥ 50 years) were new older offenders.

Health characteristics

Physical deterioration caused by alcohol abuse is often present and may have an impact on a broad variety of health problems (NIH, 2010). These health problems were prominent in our study as well as hypertension, hypercholesterolemia, myocardial infarction, epilepsy, and diabetes, and are generally consistent with other findings involving older offenders (Colsher, Wallace, Loeffelholz, & Sales, 1992; Fazel, Hope, O'Donnell, Piper, & Jacoby, 2001; Hayes, Burns, Turnbull, & Shaw, 2012). In any event, 60.3% of the older offenders deemed criminally irresponsible in our study had experienced a problematic pattern of lifetime alcohol consumption. This is much greater than 15% of male and 12% of female older primary care outpatients in the community who regularly drank in excess of the limits as reported by Adams, Barry & Fleming (1996). Our findings are more consistent with the results of MacAskill et al. (2011) who reported a problematic alcohol consumption in 73% of the cases among prisoners entering the prison system in general. From the same study it appeared that the older age group (40–65 years) demonstrated a more habitual and addictive drinking behavior. Other studies showed that 86% of the older offenders in a maximum security forensic hospital had a history of alcohol abuse (Rayel, 2000) and Curtice (2003) reported a rate of previous alcohol abuse in medium security of approximately 79%.

In addition to alcoholism, we found that nearly half of the older offenders deemed criminally irresponsible were labeled with a psychotic disorder. In approximately half of the population, a psychiatric co-morbidity was present. Comparing diagnostic rates is difficult because of the considerable differences in the composition of research populations in other studies. To illustrate this problem, Fazel and Grann (2002) reported that 31.4% of the older criminally irresponsible offenders (≥ 60 years of age) had psychotic disorders as a primary diagnosis; however, these offenders had been examined following crimes committed at a time when they were ≥ 60 years of age, which is not necessarily the case in our study.

Dementia was reported in 2.3% of our cases, which seems generally consistent with the pooled prevalence of dementia in the general European male population, as follows: 1.6% for 65–69 years; 2.9% for 70–74 years; and 5.6% for 75–79 years (Lobo et al., 2000). Moll (2013, p.11) stated that the prevalence of dementia among older prisoners remains largely undetermined. Again, comparisons between studies should be interpreted with caution. For example, in a population of older psychiatrically-examined offenders (≥ 60 years of age), Fazel and Grann (2002) reported a 7.1% rate of diagnoses of dementia, whereas Lewis (2006) reported a rate of 44.4%.

2.3.3 Limitations

Although this study had strengths, such as the fact that a systematic screening method was used to explore the files of a largely under-studied population, some weaknesses should be noted as well. Firstly, the comparison of our findings with other studies should be interpreted with caution, especially because inclusion criteria may differ considerably between studies according to place of residence, age threshold, whether or not a first offender, and whether or not labeled 'criminally irresponsible'. Secondly, the files that had been used in our study were specifically written for administrative juridical purposes rather than from a care or scientific perspective. In this respect we noted that some matters, such as medical issues, were not reported on a systematic basis and thus some of our findings are possibly more susceptible to underestimation.

2.3.4 Conclusion and recommendations

In this study the characteristics of older offenders deemed criminally irresponsible in Flanders have been thoroughly studied. As data proved difficult to retrieve in the non-digital case files, a standardized and broad health screening of all new entering older prisoners, with a specific focus on aspects related to aging, would be relevant (Watson, Stimpson, & Hostick, 2004). Given our findings, screening should focus on problems that often remain undetected among older offenders, such as age-related physical problems (e.g. cardiovascular disease and diabetes), physical and mental consequences of alcoholism, institutionalization, loneliness, mental health problems, intellectual disabilities, and early signs of dementia or other cognitive impairments. We would certainly recommend screening prisoners > 50 years of age for signs of early aging. In fact, this is consistent with the idea to apply functional criteria to investigate aging in forensic populations, as suggested by Aday and Krabill (2013). We share another recommendation of the same authors, who stated that *'sensitivity must be granted to inmate diversity and that care must be taken to ensure the climate is one conductive to supporting all offenders into their later adulthood years'* (Aday and Krabill, 2013 [p. 207]).

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Chapter 3

Factors related to the Quality of Life of older prisoners

Based on:

De Smet, S., De Donder, L., Ryan, D., Van Regenmortel, S., Brosens, D., Vandevelde, S. *Factors related to the Quality of Life of older prisoners*. (under review after first revision)

Abstract

Purposes: There is evidence of an increasing emphasis on the relevance of the Quality of Life-paradigm as an outcome measure for clients in geriatric, forensic as well as correctional care. This paper aims to explore to what extent variables, that were categorized according to the main areas of the Good Lives Model ('the self', 'the body' and 'social life') are related to the Quality of Life domains of older imprisoned offenders.

Methods: Data was collected by means of a structured questionnaire administered in individual interviews with 93 older prisoners aged 60 years and over in 16 prisons of the Dutch-speaking region in Belgium. Characteristics of the main GLM-areas were identified by specifically designed items as well as 3 validated instruments (psychiatric disorders, loneliness, frailty). Dependent variables consisted of the four sub-domains of the WHOQOL-BREF instrument which measures quality of life in four domains, namely: (1) physical health (2) psychological health (3) social relationships and (4) environment. Structural equation modelling (SEM) was used for statistical analysis.

Results: Individual variables such as satisfaction with activities were related to the older prisoners' QoL in several domains simultaneously. Other than suicidal ideation, psychopathological symptoms had no significant relation to quality of life.

Conclusions: Approaches enabling older prisoner to disclose their interests, experiences and feelings are important in prison. Special attention should be given to psychiatric and age-related symptoms of older prisoners since they may not be noted by the prison staff, as older prisoners seem to be poorer self-advocates as compared to their younger peers.

3.1 Introduction

Correctional institutions in Europe are increasingly challenged to deal with a growing number of older prisoners with distinct physical, mental, and social needs (Hayes, Burns, Turnbull, & Shaw, 2012). The Quality of Life of these older prisoners may be affected by age-related decline such as dementia (Moll, 2013), cardiovascular, musculoskeletal and respiratory problems (Fazel, Hope, O'Donnell, Piper, & Jacoby, 2001). Aging issues may be aggravated by the accumulation of adverse historical lifestyle factors, e.g. addiction problems (mainly alcohol abuse), head injuries (Hayes, Burns, Turnbull, & Shaw, 2013; Davoren et al., 2015) traumatic experiences in youth and stressful life events (Maschi, Morgen, Zgoba, Courtney, & Ristow, 2011). In addition, there is a growing body of evidence that the quality of everyday life of (older) prisoners is negatively influenced by the prison climate. Factors mentioned in the literature for example include noise and over-crowding, disconnection from family and friends, difficult visiting conditions, low food quality and frequent searches in the cells (Ross, Diamond, Liebling, & Saylor, 2008). Liebling and Arnold (2012) indicated that the trust in social relationships between prisoners and between prisoners and prison staff declined in recent years, referring to the prison culture becoming more individualistic as a result of the emphasis on risk assessment. Furthermore, Crawley (2005) used the term "institutional thoughtlessness" with reference to the poor infrastructural adaptation in prisons as well as the lacking awareness or reluctance of prison officers to engage in what is perceived as 'nursing' tasks for age-related issues.

However, under the impetus of strengths-based approaches in criminology and forensic psychology, such as the desistance paradigm, supporting the Quality of Life of offenders is increasingly being considered important (Ward & Maruna, 2007). In this regard, Quality of Life is included as an outcome indicator in prison climate studies (Mooney, Hannon, Barry, Friel, & Kelleher, 2002; Ross et al., 2008; Johnsen, Granheim, & Helgesen, 2011) and research on the rehabilitation of offenders (Bouman, Schene, & de Ruiter, 2009; Vorstenbosch, Bouman, Braun, & Bulten, 2014; Van Damme, 2015; Vandevelde et al., 2016). The Good Lives Model (GLM) for offender rehabilitation is a recently developed strength-based model that aligns well with the heightened interest in offenders' Quality of Life (Vandevelde et al., 2016). One of the assumptions of the GLM is that if prisoners are able to satisfy important needs (primary goods) in non-criminal ways (secondary goods), recidivism may decrease while, at the same time, the quality of life of the offender may increase (Bouman, Schene, & Ruiter, 2009). According to the GLM, eleven primary goods, clustered in three areas, are identified as essential for a good life (1) primary goods relating to the "body" (basic physiologic needs, e.g., physical safety); (2) primary goods relating to the "self" (basic psychologic capacities, e.g., autonomy); and (3) primary good relating to the "social life" (need for relatedness, e.g., family contacts) (Ward, 2002). However, in aging prison populations the interaction of prisoner characteristics (historical and age-related) with the prison environment may lead to particular challenges in each of these three areas.

With respect to health and physiological aspects ("*body*"), lung disease, cardiovascular disease, diabetes, and arthritis are commonly reported issues among older prisoners (Aday, 2003). Similarly, physical deterioration leads to increased vulnerability for aggression by younger prisoners (Howse, 2003), victimization and intimidation (Davoren et al., 2015), especially addressed towards persons who have committed sexual offenses (Crawley & Sparks, 2006). Physical decline causes greater challenges in using certain facilities (e.g., stairs), and reduces the capability to understand staff requests or instructions because of hearing or vision impairment (Dretsch, 2013).

Mainly because the emphasis of the prison environment is placed on punishment instead of care (Crawley, 2005) older prisoners' health needs, and in particular those related to mental health treatment and support are often unmet (Loeb, Steffensmeier, & Myco, 2007).

In relation to the issue of psychological needs ("*self*"), a study in the United Kingdom revealed that 50% of the older prisoners had a mental disorder, with depression as the most common issue (Kingston, Le Mesurier, Yorston, Wardle, & Heath, 2011). Affective disorders and alcohol misuse (respectively 40% and 46% in the male population) appeared highly prevalent among older remand offenders (Davoren et al., 2015). Risk factors for suicidal ideation in prison have been associated with depressive disorders, psychological states of depression, hopelessness, pre-incarceration history of psychiatric disorder and substance abuse (Gupta & Girdhar, 2004) and the extent of adaptation to the prison system (Fazel, Hayes, Bartellas, Clerici, & Trestman, 2016). Prisoners with mental disorders have poorer overall health and higher rates of prison-based victimization and feelings of un-safety (Wolff, Blitz, & Shi, 2007).

Concerning the social needs ("*social*"), some offenders with long-term sentences seem capable of creating a new social life in prison (Aday, 2003). Yet, among the major pains of permanent imprisonment 'missing somebody' and 'missing social life' appeared the most apparent, even after decades of incarceration (Leigey & Ryder, 2015). Other older prisoners tend to withdraw themselves in their cells (Aday, 2013). Older prisoners incarcerated for the first time are not adapted yet to the prison system and appear at greater risk of isolation, when their role as a parent and/or grandparent is abruptly terminated (Aday, 2003). It should be taken into account that older prisoners tend to behave more quiet socially and are less likely to complain and raise issues than younger prisoners. Accordingly their problems can easily be overlooked (House of Commons Justice Committee, 2013).

A previous descriptive study on the health needs and QoL of older prisoners in the Dutch-speaking part of Belgium (Flanders) confirmed that older prisoners may be confronted with important problems in the areas of "body", "self", and "social", as discerned in the GLM (De Smet, under review). Considering the growing relevance of QoL as an outcome measure for geriatric (Mollenkopf & Walker, 2007), forensic (Bouman, Schene, & Ruiter, 2009; Vandevelde et al., 2016; Vorstenbosch et al., 2014) and correctional care (Togas et al., 2014) , this paper aimed to explore to what extent each of these areas are related to the QoL of older imprisoned offenders.

3.2 Methods

This study was based on data collected in 2014 from older prisoners > 60 years of age (n=110) in 16 prisons of the Dutch-speaking region in Belgium, excluding remand prisoners. All participants were interviewed in person using a structured questionnaire that contained standardized instruments available in the Dutch language such as the Mini International Neuropsychiatric Interview (MINI, version 5.0.0 DSM-IV) (Sheehan & Lecrubier, 2006), the Tilburg Frailty indicator (Gobbens, Luijkx, & van Assen, 2013), De Jong-Gierveld Loneliness Scale (brief version) (De Jong Gierveld & Tilburg, 2010) and the WHOQOL-BREF (Saloppé & Pham, 2006). Other items, were based on specific issues related to prison context that were derived from a literature review (De Smet, Vandevelde, Verté & Broekaert, 2010) and qualitative research (De Smet et al., 2014). It should be noticed that other standardized instruments to measure Quality of Life in offender populations such as the Forensic Camberwell Assessment of Need (CANFOR) appeared to aim explicitly at forensic mental health service users (and mental health care staff) and not at (aging) prison populations (Thomas et al., 2008). Many generic quality of life instruments were not applicable (e.g. because these refer to issues that are not relevant for persons in residential services, such as taking public transport), and there is a lack of specific instruments (e.g. Measuring Quality of Prison Life Scale; MQPL) suitable to compare the QoL in different environments, e.g. inside prison and after release (van Nieuwenhuizen, Schene, & Koeter, 2002). Therefore, we used the WHOQOL-BREF, a widely used generic Quality of Life instrument that can be applied irrespective of living context. The WHOQOL-BREF has been validated for several populations, including prisoners (Mooney et al., 2002), forensic inpatients (Saloppé & Pham, 2006), mental health psychiatric outpatients (Trompenaars, Masthoff, Van Heck, Hodiamont, & De Vries, 2005) and community dwelling older people (Hwang, Liang, Chiu, & Lin, 2003). Ethical approval (B.U.N. 143201319442) was provided by the Ethics Committee of the University Hospital of the Vrije Universiteit Brussel, while authorization for access to the population was granted by the Belgian Federal Public Service for Justice.

Cases with missing values in any of the computed variables were excluded in accordance with the directions of the statistical method used. Thus, 93 valid cases were retained, which represents a response rate of 45% of the entire population of older prisoners in Flanders (n=206) at the time of data collection. The mean age was 65.2 years (SD= 4.9), 93.5% (n=87) were male, and the length of continuous time involved in the current incarceration varied between less than one year and 34.7 years (M= 5.4, Mdn= 3.0, SD=5.9).

In two consensus meetings among the authors, each of the investigated items was discussed in relation to the description of the three basic areas of the Good Lives Model: the body, the self and the social (Ward, 2002). Accordingly, 18 independent variables were selected and categorized: self (n=5), body [n=5), and social life (n=8).

All categorical variables were recoded into dichotomous variables according to the general principle "existing problem= 1; and no problem= 0", except for the variable, number of hours spent inside the cell, that was computed as a continuous variable.

SELF

1. Psychopathology was measured by the Mini International Neuropsychiatric Interview (MINI, version 5.0.0 DSM-IV) (Sheehan & Lecrubier, 2006), which allows the interviewer to assess the criteria of Axis I psychiatric disorders, as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Apart from the antisocial personality disorder, the MINI is not designed to screen any other personality disorder (Axis 2 in DSM-IV).
2. Suicidal risk is included as a full item in the MINI; however, according to the DSM-IV classification, suicidal ideation must be viewed as a criterion that contributes to a psychiatric diagnosis rather than being considered a psychiatric disorder in and of itself. Therefore, suicidal risk was considered as a distinct variable.
3. Perceived agency was measured by the following statement: "I want to quit prison as soon as possible because I believe that I am still able to live a fulfilling life after incarceration."
4. Perceived vulnerability was measured by the following question: "To what extent does the next statement correspond to your situation? Other prisoners consider me as vulnerable."
5. Perceived respect was measured by the following question: "To what extent does the next statement correspond to your situation? I am still capable of demanding respect from other prisoners."

BODY

1. Medical complaints were measured by the following question: "Which of the following medical problems apply to your health status? A list of eleven pre-defined common age-related physical health issues was read out by the interviewer. Additional complaints were registered as well and recoded. There were no respondents without reported problems.
2. Physical frailty by ageing was measured by the subdomain, physical frailty, of the Tilburg Frailty indicator, which is a validated instrument to assess the extent of frailty of older people consisting of eight yes or no questions (Gobbens et al., 2013) about general physical well-being, loss of weight, mobility (walking), balance, vision, hearing, strength in the hands, and tiredness (Cronbach α=.74) .
3. Perceived health status was measured by the following question: "How would you assess your own health status in comparison with your contemporaries in prison?"
4. Physical safety / victimization was measured by the following question: "How safe do you feel in the company of other prisoners?"
5. Needs support for activities of daily living was measured by the following question: "Would you prefer to receive more support for your daily activities (washing, clothing, and eating)?"

SOCIAL

1. Feelings of loneliness were measured by the validated measurement tool, De

Jong-Gierveld Loneliness Scale (brief version), which consists of six items on a five-point Likert scale (Cronbach α= .68) ('Manual Loneliness Scale', 1999)

2. Satisfaction with activities was measured by the following two questions: (1) "Do you have enough activities during incarceration during week time?" and (2) "Do you have enough activities during incarceration during the weekends?"
3. Prison job was derived from the following question: "How much do you work in prison (paid job)?"
4. Hours inside the prison cell was measured by the following question: "How many hours per day do you spend in your prison cell, nights included?"
5. Frequency of external visitors was measured by the following question: "How often do you receive visits?"
6. Desire more external visits was measured by the following question: "Would you like to receive more visits?"
7. Frequency of personal conversations with prison guards was measured by the following question: "How often do you talk about personal matters with custodial staff?"
8. Social isolation was measured by the following question: "To what extent do you agree with the following statement about your social network? Actually, I have no significant social contacts anymore, either inside or outside of prison."

Dependent variables consisted of the four scaled scores of the World Health Organization Quality of Life Assessment short version (WHOQOL-BREF), which measures QoL in four sub-domains: (1) physical health, seven items (Cronbach α= .82); (2) psychological health, six items (Cronbach α= .68); (3) social relationships, three items (Cronbach α= .71); and (4) environment, eight items (Cronbach α= .65). Originally, the WHOQOL-BREF was used as a paper and pencil instrument with scores on a five-point scale to be completed by the respondent; however, in the current study interviewers read all items and scored the answers. The questionnaire and instructions of the WHOQOL-BREF are available online (WHOQOL-BREF, 1996).

Structural equation modeling (SEM) was used for statistical analysis and was carried out using AMOS (IBM Corp. Released 2011. IBM SPSS Statistics for Windows, Version 20.0. Armonk, NY: IBM Corp). Although SEM gives better estimates of effect size than traditional statistical methods for observed variables (Kline, 2010), it should be noticed that it is often assumed that sample sizes of less than 200 may lack sufficient statistical power (Barrett, 2007). Accordingly the sample size of n=93 in our study is clearly a restriction that must be taken into account. On the other hand it is stated that smaller sample sizes (< 100) can be appropriate for SEM analysis as well, under the dual condition that (1) the population to be studied is restricted in size and (2) a simple model is evaluated (Kline, 2010). Both conditions apply to this study.

In the first step, the contribution of each of the basic three areas (self, body, and social life) on each of the four domains of QoL (WHOQOL-BREF) was tested (n = 12 models). To evaluate the goodness of model fit, we applied the chi-square ($\chi 2$) test of

model fit, the root mean squared error of approximation (RMSEA), the Goodness of Fit Index (GFI), and the Comparative Fit Index (CFI). We used RMSEA values < .05, and GFI values and CFI values > .90 as good fit indices (Brown, 2006). In the second step, variables from the three sub-domains that contributed significantly in the first step were jointly tested in a new model on the four domains of QoL (WHOQOL-BREF), and this according to the same statistical criteria that were applied in the first step (n= 4 models). In agreement with the common research strategy to improve the model fit (Brown, 2006), correlations of independent variables were accepted in each model to approach the required standards, as set out for the aforementioned fit indices that have been applied in this study. Model fit summaries with figures of each model (n=16) are electronically available and can be requested from the corresponding author.

3.3 Results

The frequencies of dependent variables in the self, body, and social areas are shown in Table 1.

Self – Nearly one-fourth (24.2%) of the participants were identified as being at risk of committing suicide and nearly one-half seemed to have at least one psychiatric disorder. Nearly one-quarter (22.6%) of the participants felt unsure about their ability to gain respect from other prisoners and in keeping with that finding, about one in seven (15.1%) believed that other prisoners regarded them as vulnerable persons.

Body – All respondents mentioned having at least one medical problem, with six in ten reporting at least two medical conditions (60.2%). Almost one in seven (15.1%) perceived their own health status was worse than that of their ageing prisoner peers and a corresponding number (16.1%) felt unsafe in company of other prisoners. Nearly one in ten (8.6 %) expressed the need for more support in the activities of daily living (washing, dressing, feeding, and hygiene).

Social – Three-fourths (75.3%) of the participants identified themselves as lonely. Nearly one-half of the population had visitors less than once per month, whereas four in ten (40.9%) wanted more company. Nearly two-thirds (63.4%) did not engage in personal conversations with prison guards. More than one-half of the respondents did not have any paid prison job (52.7%). More than one-third (36.6%) of the respondents reported that they believed the number of in-prison activities was insufficient. Nearly one-third of participants (30.1%) did not leave their cell for more than two hours in each 24-hour period, with one in eight (12.9%) never leaving their cell.

The scaled results and distributions of the dependent variables (the four domains of the WHOQOL-BREF) are presented in Table 2. Results must be interpreted against the following scale: 0 = no QoL; and 100 = optimum level of QoL. The QoL domain which achieved the lowest mean score was social QoL (M = 52.96), with participants reporting the highest mean score for the QoL domain relating to physical health (M = 72.96).

Step 1: Relation of the self, body, and the social life to the domains of QoL

Table 4 presents the relation of the self, body, and social to each of the four domains of the WHOQOL-BREF. In the process of achieving a good model fit 1) three variables (perceived agency in the self, medical complaints, and need for help in the body) were removed from the models and 2) independent variables were allowed to be correlated for item pairs. This led to a significant increase in model fit compared to the model without correlated independent variables. This acceptance of substantial overlap between pairs of items was theory-driven. For example: Items 5 and 8 from the Social GLM domain are strongly content-related. The items "frequency visitors from outside" (item 5) and "total isolation" (item 8) both measured the quantity of social contact. Also in the final models, items from the three GLM domains could correlate with each other. For example, item 1 from the Body (physical frailty by ageing) and item 2 from the Social domain (satisfaction with activities offered) were theoretically and in practice related. The dissatisfaction could derive from the fact that high number of activities are designed for young, active offenders. The decision to accept these correlations between the independent variables gained the upper hand on the decision to exclude these items.

SELF – Because self embodies mental and emotional features, it was expected that this area would be most strongly associated with the psychological dimension of the QoL *($R^2 = .32$)*. Within self, both suicidal risk and the lack of ability to gain respect from other prisoners appeared the most significant related factors, with both statistically significant relations with regard to two differing domains of the QoL. Suicidal risk was shown to be statistically significant related to the Physical QoL subscale *($\beta = -.22$, $p = .026$)* and the Psychological QoL subscale *($\beta = -.37$, $p = .000$)*. Similarly, perceived respect was also statistically significant related to level in two domains of QoL (Environmental QoL subscale, $\beta = -.29$,$p = .005$; and Psychological QoL subscale, $\beta = -.38$, $p = .000$). Finally, another element of self (Perceived Vulnerability domain) also was statistically related to the Physical QoL subscale *($\beta = -.31$, $p = .002$)*. Remarkably, psychopathology was not significantly related to any of the QoL domains.

BODY – In relation to the body, physical frailty was statistically significant associated to three domains of the QOL (Environmental QoL, $\beta = -.20$, $p = .032$; Physical QoL, $\beta = -.43$, $p = .000$; and Psychological QoL, $\beta = -.21$, $p = .036$). Similarly, in the case of participants' self-perception health status compared to older peers in prison, the same three domains of the QoL were statistically significantly associated with this measure (Environmental QoL, $\beta = -.26$, $p = .005$; Physical QoL, $\beta = -.46$, $p = .000$; and Psychological QoL, $\beta = -.23$, $p = .021$). A third measure of body (physical safety and victimization by prisoners) also emerged as being statistically significantly related to both the Environmental QoL *($\beta = -.33$, $p = .000$)* and Social QoL *($\beta = -.20$, $p = .045$)*.

SOCIAL – The relation to the respondents' satisfaction with available activities appeared to be statistically significant in three different QoL domains. The strongest relation

was to Environmental QoL *(β = -.46, p= .000)*, followed by Physical QoL *(β = -.44, p = .000)* and Psychological QoL *(β = -.30, p = .001)*. Feelings of loneliness did not reveal any significant association with any of the QoL domains. In contrast, both the frequency of visitors *(β = .24, p = .014)* and the desire for more visits *(β = -.25, p = .009)* did relate to the Psychological QoL significantly. Similarly, feelings of an entirely isolated social life in prison were negatively related to the Social QoL *(β = -.43, p = .000)*. Interestingly, the number of hours that older prisoners stayed locked inside their prison cells only related significantly to Physical QoL *(β = -.23, p = .024)* and not to any other domain. Of note, the frequency of personal conversations with prison guards had no significant association with any of the QoL domains.

Step 2: Relation of significant variables to the four domains of QoL (WHOQOL-BREF)

Independent variables without any significant level of association in step 1 were removed (n = 4); specifically, in self, psychopathology and feelings of loneliness were removed, and in social, prison job and frequency of conversations with prison guards were removed. The remaining significant independent variables (n = 11) were all included in the models on each of the four QoL domains (Table 4). In this step, some shifts and changes in significance of variables between the first step and the second step were noticed.

SELF – Suicidal risk maintained its relation to the extent of physical QoL *(β = -.18, p = .018)* and Psychological QoL *(β = -.40, p = .000)*. Perceived vulnerability lost its significance in relation to the Physical QoL. Similarly, perceived respect lost its significant relatedness to Environmental QoL, but the latter retained its relation to Psychological QoL *(β = -.32, p = .000)*.

BODY – Physical frailty still associated with the Physical QoL *(β = -.29, p = .000)*, but lost its significant connection to Environmental QoL. Self-perception of the health status retained associated with Physical QoL *(β = -.36, p = .000)*, lost association with the Psychological QoL, but showed a new significant relation to the Social QoL *(β = -.18, p = .044)* in this model. Feelings of physical safety retained a relation to Environmental QoL *(β = -.21, p = .023)*, but lost association with Social QoL.

SOCIAL – Similar to Step 1, satisfaction with activities remained an important variable with significant connection to Environmental QoL *(β = -.42, p = .000)*, Physical QoL *(β = -.32, p = .000)*, and Psychological QoL *(β = -.22, p = .009)*. Remarkably, in Step 2, hours inside the cell had no statistically significant relation to any of the QoL domains and frequency of visitors lost impact on Psychological QoL, but instead gained significant association on Social QoL *(β = -.23, p = .009)*. Desire for more visits remains related to the Psychological QoL *(β = -.19, p = .026)* and Social QoL *(β = -.25, p = .005)*. Entire social isolation remained strongly associated with the Social QoL *(β = -.44, p = .000)*.

3.4 Discussion

In this study, the relation between the independent variables, as set out in the GLM (conceptualized as the areas of self, body, and social), and the QoL of older prisoners was investigated in a first step.

Results in relation to self, which are perceived as the fundamental psychological needs that older prisoners require to function in the world, revealed that psychological and physical QoL are highly associated with suicidal ideation. Recently published longitudinal community-based findings revealed that suicidal ideation significantly lowered the mental QoL, but not the physical QoL (Fairweather-Schmidt, Batterham, Butterworth, & Nada-Raja, 2016); however, psychopathology outside of suicidal ideation seemed to be not related to any of the QoL domains in this study. The latter is noteworthy at two levels. First, high levels of psychiatric morbidity were revealed in this population, which is consistent with other studies (Cox & Lawrence, 2010; Fazel & Lubbe, 2005; White & Whiteford, 2006). Second, in general populations, psychopathology appears to be negatively associated with QoL (Masthoff, Trompenaars, Van Heck, Hodiamont, & De Vries, 2006). In agreement with our results, there was at least one other study in a high secure forensic institution which showed that major psychiatric disorders was not related to the QoL (Saloppé & Pham, 2007). This similarity in results should be interpreted with caution because the settings (prisons vs. high security forensic psychiatric setting) and respondents (older prisoners against vs. security forensic psychiatric patients of all ages) in both studies are different.

Nevertheless, this finding warrants further attention and discussion. For instance it could be hypothesized that the self-awareness among older prisoners about psychiatric ill behavior might be lower in prison environments due to the repetitive and regimented daily life in which symptoms may pass unnoticed by the correctional staff. Guards are deployed to manage security tasks in the first place rather than to therapeutically approach mental health problems with older prisoners (Leete, 2012). Overlooking older offenders may be caused by the fact that many older prisoners appear poorer self-advocates and behave more quiet than the younger prison population (House of Commons Justice Committee, 2013). The assumption of reduced self-awareness of mental health issues among older prisoners in association to the specificity of the prison culture seems partly supported by an Australian study in which significantly lower average levels of self-reported psychological distress of older prisoners were revealed in comparison with younger prisoners. In the same study significantly higher levels of distress in older prisoners in comparison with older people in the community were mentioned (Baidawi, 2016).

In relation to social life, the most distinctive factor related to QoL stemmed from the satisfaction with activities available in prison. The number of hours that older prisoners stay locked in their cells was related limitedly to the QoL (apart from the physical domain). However, the extent of being socially isolated should not be confused with the extent of feelings of loneliness (Valtorta & Hanratty, 2012). It is known that in cases

where individuals perceive tension (e.g., depression, anxiety, psychotic disorders, and autism), social withdrawal can be perceived as an effective coping strategy to diminish personal stress. Similar to the relation of psychopathology with QoL, while there was a high prevalence of loneliness reported, it was not related to QoL. It should be noted if respondents desired more visits or declared they had feelings of deprivation, this was significantly related to a lower psychological QoL. Thus, the issue of concern is not the actual physical isolation or the extent of social engagement participants reported based on the number of visits they had, but rather the perceptions of deprivation as a result of their situation. Social isolation in a prison context may be desirable for a range of reasons, including ensuring personal safety in challenging environments.

Results related to the body disclosed the negative relation between victimization by other inmates and the Environmental and Social QoL domains. As suggested, either social isolation (where it is chosen by prisoners) or withdrawing behavior can be understood as an attempt to cope with fear for personal safety. Moreover, the study revealed significant relationships between physical frailty and self-perceived health status among the study population compared to older peers on the Psychological, Environmental, and Physical QoL domains. Previous research demonstrated that socially secluded prisoners tend to become more conscious of signs of potential rejection and victimization because they focus on cues that are consistent with their expectations, and as a consequence they often respond through social withdrawal (Ireland & Qualter, 2008). This interpretation is consistent with findings from self, which suggested that both the ability to force respect as well as to be viewed as vulnerable by others are significantly related to the Psychological QoL domain.

In this study, 11 variables that appeared to be significantly related in the first step were tested in another model. As a result, nine variables with a strong statistical relation to one or more QoL domains of older prisoners emerged.

Therefore, endeavoring to ensure that a good life for older imprisoned offenders is achieved may require that actions should be undertaken to meet the needs that are related to those variables which have emerged as significantly related to a better QoL. Accordingly, for instance the finding that major psychiatric disorders were not associated with higher levels of QoL may imply that less attention should be given to symptom management (particularly in long-stay populations) but instead more efforts should go to factors related to the development of (age) tailored provision of occupational activities inside prisons that aim at self-esteem, and that promote pro-social, assertive communication skills and which are supportive for the community transition (DeVos, Kelly Hauser, Kitchen, Homes, & Ring, 2012; Baidawi, 2016).

Furthermore, it is recommended that the presence of suicidal ideations should be regularly screened and the underlying contributory factors associated with such ideations should be clarified for each individual which in practice should be a collaborative responsibility of administrative, custodial and clinical staff (Daniel, 2006). Forrester and Slade (2014, p. 1110), recommend to invest in a multi-agency collaboration of volunteers, professionals, peers in order to support prisoners who

are experiencing distress. In this regard, adopting the practice of 'prison listeners' in order to prevent suicide by peer support (Griffiths & Bailey, 2015) could be valuable for older prisoners. Further research on how older offenders may act as 'listeners' to other offenders might be an interesting avenue, as older offenders may have a good profile for this task. Vice versa peer support for aging long term imprisoned offenders (e.g 'buddy') by younger prisoners would be an interesting way to provide opportunities to develop intergenerational supportive relationships in prison. Likewise, causes of social withdrawal could be given greater attention and addressed. The same applies to the impact of physical deterioration and the desire for more visits.

Since the study was restricted to Flanders and due to the small sample size of the study (which has an impact on statistical power, and limited the possibility for bootstrapping), the generalizability of results should be considered with caution. Furthermore, we have used an age threshold of 60 years, which is in accordance with 'the agreed cut-off age for older persons' as defined by the World Health Organization (WHO) and the United Nations (UN) (Bretschneider, Elger, & Wangmo, 2013, p. 268). This threshold is used in other publications on older offenders as well (Davoren et al., 2015; Seena Fazel & Grann, 2002; Yorston & Taylor, 2006). Yet, we are aware that lower thresholds, even to 50 years of age, are used in other publications (Aday, 1994; Fellner, 2012). These differences in age thresholds make it difficult to compare international findings. Another limitation pertains to the development and validation of some of the items, as standardized instruments were lacking or not yet available in Dutch. Although the items were classified during two consensus meetings, some items might be somewhat equivocal. E.g. the item *"I want to quit prison as soon as possible because I believe that I am still able to live a fulfilling life after incarceration "* might refer to agency, but it may also have been interpreted as experiencing hope/optimism. More research using standardized instruments as well as more qualitative studies are warranted, with a focus on approaches enabling older people to disclose their experiences and feelings. Special attention should be given to psychiatric and age-related symptoms of older prisoners since they may not be noted by the prison staff, as older prisoners seem to be poorer self-advocates as compared to their younger peers.

Compliance with Ethical Standards:

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Conflict of Interest: All authors declare that they have no conflicts of interest.

Ethical approval: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent: Informed consent was obtained from all individual participants included in the study.

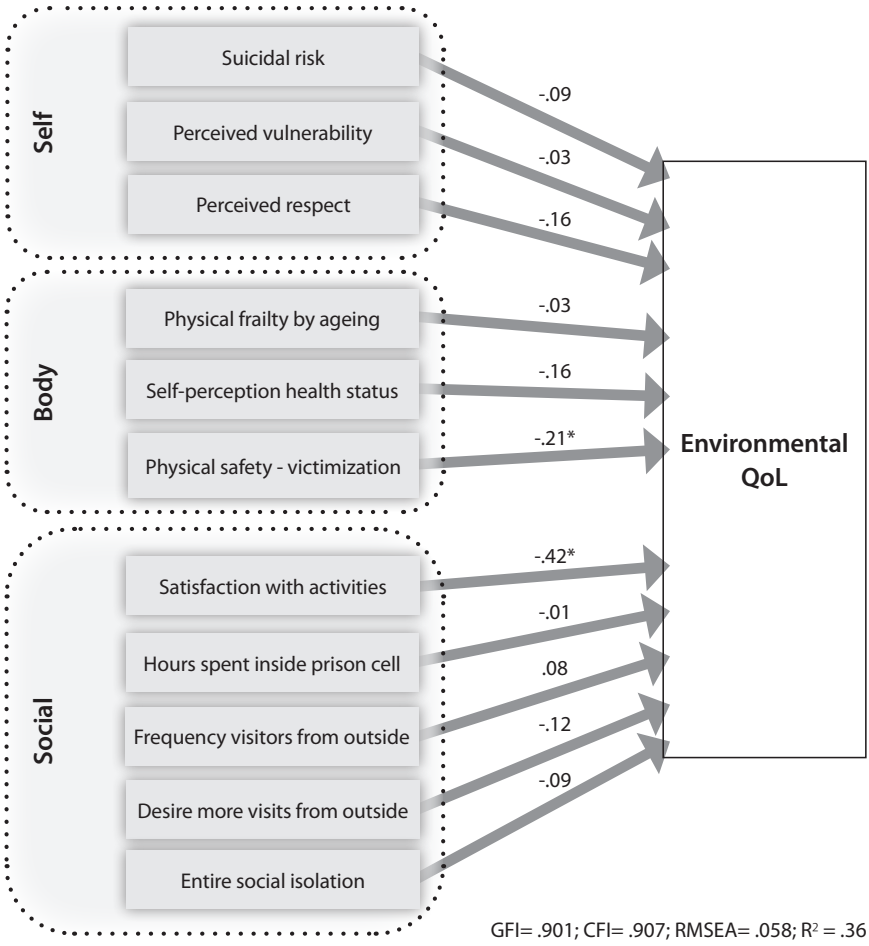

Figure 1. Path diagram of the hypothesized model of factors related to the environmental domain of Quality of Life measured by the WHOQOL-BREF. Presented are the standardized coefficients.

*Significant path coefficients ($p < .05$)

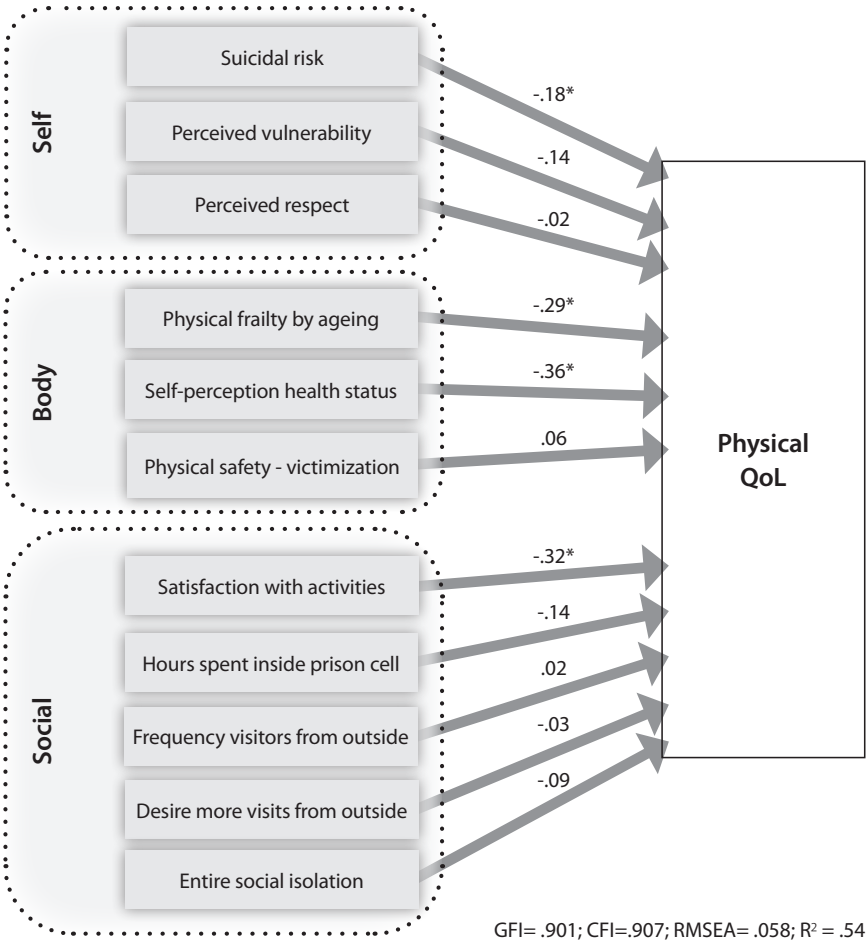

Figure 2. Path diagram of the hypothesized model of factors related to the physical domain of Quality of Life measured by the WHOQOL-BREF. Presented are the standardized coefficients.

*Significant path coefficients ($p < .05$)

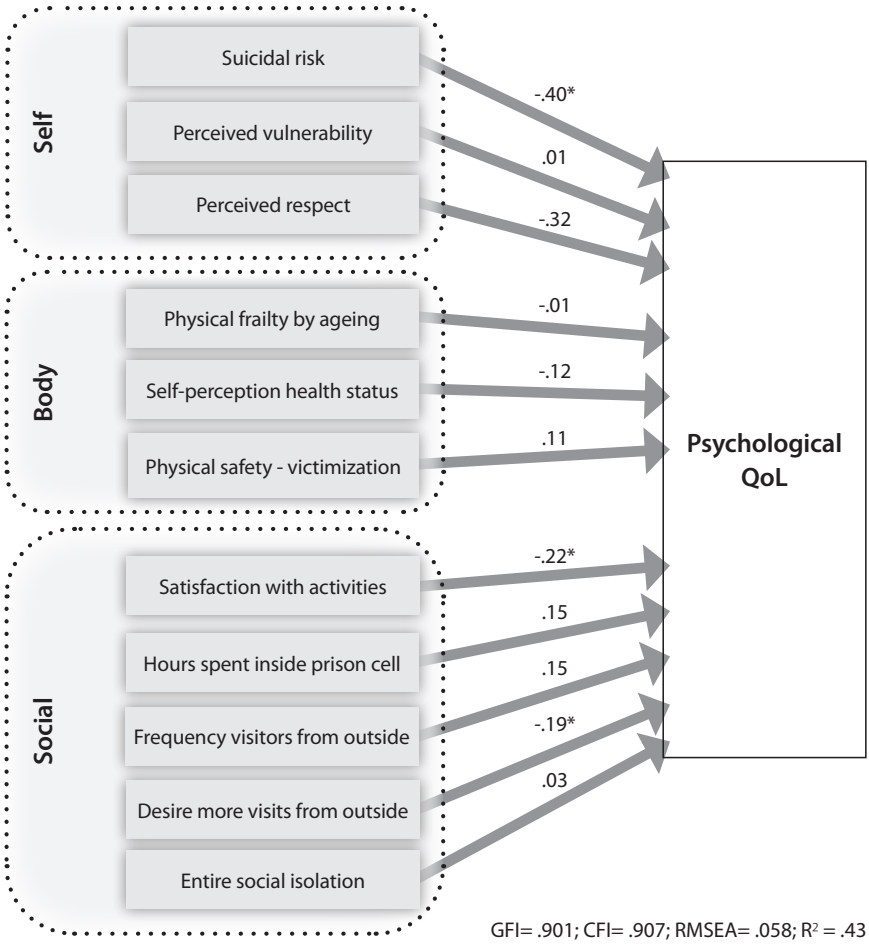

Figure 3. Path diagram of the hypothesized model of factors related to the psychological domain of Quality of Life measured by the WHOQOL-BREF. Presented are the standardized coefficients.

*Significant path coefficients ($p < .05$)

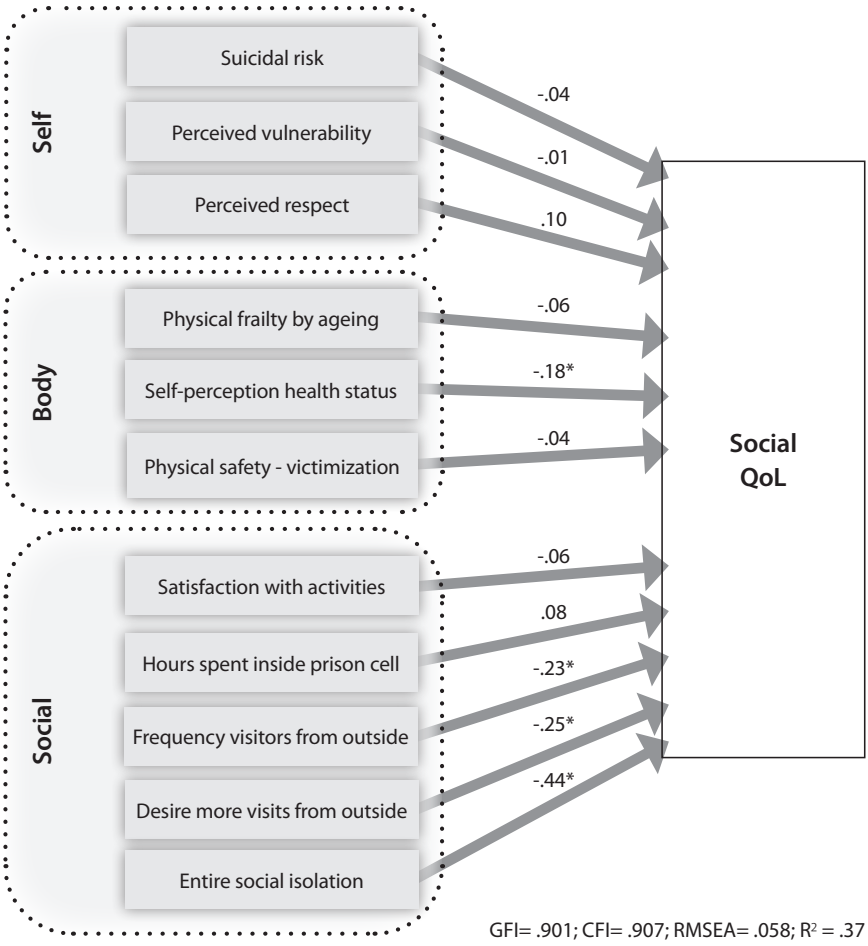

Figure 4. Path diagram of the hypothesized model of factors related to the social domain of Quality of Life measured by the WHOQOLBREF. Presented are the standardized coefficients.

*Significant path coefficients ($p < .05$)

Table 1. Frequencies of independent variables (n = 93)

INDEPENDENT VARIABLES	% (n)
Self	
Psychopathology (excluding suicidal risk; including antisocial personality disorder)	46.2 (43)
Suicidal risk	24.7 (13)
Lack of agency of the future life (lack of expectation of having a future life outside prison)	7.5 (7)
Perceived vulnerability (perceived vulnerability from other prisoners)	15.1 (14)
Perceived respect (perceived difficulty in achieving respect from others)	22.6 (21)
Body	
Self-reported medical complaints (at least two complaints)	60.2 (56)
Physical frailty related to ageing (at least one indication of frailty)	69.9 (65)
Poor self-perception of their own health status compared to older peers in prison	15.1 (14)
Physical unsafety – victimization by prisoners	16.1 (15)
Needs more support ADL*	8.6 (8)
Social	
Feelings of loneliness	75.3 (70)
Satisfaction with activities offered (dissatisfaction during weekdays and/or weekends)	36.6 (34)
Not having a prison job	52.7 (49)
Hours outside the prison cell	
Never leaves the cell – 0 h/24 h outside the cell	12.9 (12)
Maximum of 2 h/24 h outside the cell	30.1 (28)
At least 3 h/24 h outside the cell	57.0 (53)
Frequency of visitors from outside – never or maximum a few times per year	45.2 (42)
Desire to have more visits from outside	40.9 (38)
Frequency of personal conversations with prison guards – never engages in such personal conversations	63.4 (59)
Total social isolation	19.4 (18)

Table 2. Results of scaled dependent variables – four domains WHOQOL-BREF (n=93)

	Physical QoL	Psychological QoL	Social QoL	Environmental QoL
Mean	72.96	65.50	52.96	61.29
Median	78.57	70.83	50.00	62.50
Std. Deviation	22.71	18.08	24.93	16.97
Range	85.71	83.33	100.00	81.25
Minimum	14.29	12.50	0.00	12.50
Maximum	100.00	95.83	100.00	93.75

Table 3. Pearson correlation between the dependent variables

	Physical QoL	Psychological QoL	Social QoL	Environmental QoL
Physical QoL	1			
Psychological QoL	.455*	1		
Social QoL	.314*	.282*	1	
Environmental QoL	.555*	.441*	.403*	1

*, p<.000

Table 4. Structural equation models of SELF, BODY, and SOCIAL on the four QoL-domains

	Environmental QoL		Physical QoL		Psychological QoL		Social QoL	
Self	β	p	β	p	β	p	β	p
Suicidal risk	-.17	.119	-.22	.026 *	-.37	.000*	-.19	.102
Perceived vulnerability	-.13	.214	-.31	.002 *	-.05	.604	-.02	.831
Perceived respect	-.29	.005 *	-.18	.052	-.38	.000*	-.12	.265
Psychopathology	-.09	.413	-.14	.161	-.05	.635	-.04	.755
GFI (> 0.9)	.986		.986		.986		.986	
CFI (> 0.9)	.996		.997		.997		.995	
RMSEA (< 0.05)	.027		.027		.027		.027	
R^2	.18		.29		.32		.06	
Body								
Physical frailty by ageing	-.20	.032 *	-.43	.000 *	-.21	.036 *	-.17	.086
Self-perception health status compared to older peers in prison	-.26	.005 *	-.46	.000 *	-.23	.021 *	-.10	.341
Physical safety – victimization by prisoners	-.33	.000 *	-.09	.222	-.09	.364	-.20	.045 *
GFI (> 0.9)	.988		.988		.988		.988	
CFI (> 0.9)	.989		.995		.976		.968	
RMSEA (< 0.05)	.042		.042		.042		.042	
R^2	.24		.48		.13		.09	
Social								
Feelings of loneliness	.00	.988	.09	.278	-.01	.940	.16	.075
Satisfaction with activities offered	-.46	.000 *	-.44	.000 *	-.30	.001 *	-.06	.454
Prison job	-.10	.330	-.16	.096	.14	.186	.07	.490
Hours inside prison cell	-.05	.606	-.23	.024 *	.00	.992	-.05	.615
Frequency visitors from outside	.12	.186	.15	.103	.24	.014 *	-0.9	.338
Desire more visits from outside	-.17	.050	.00	.976	-.25	.009 *	-.23	.007 *
Frequency personal conversations prison guards	.05	.599	.09	.261	-.02	.841	-.01	.905
Entire social isolation	-.19	.050	-.17	.070	-.13	.213	-.43	.000 *
GFI (>0.9)	.940		.940		.940		.940	
CFI (> 0.9)	.953		.957		.942		.954	
RMSEA (<0.05)	.045		.045		.045		.045	
R^2	.32		.38		.24		.36	

* p < .05

Table 5. Impact of significant variables on the four QoL-domains of the WHOQOL-BREF

	Environmental QoL		Physical QoL		Psychological QoL		Social QoL	
	β	p	β	p	β	p	β	p
Self								
Suicidal risk	-.09	.294	-.18	.018*	-.40	.000*	-.04	.641
Perceived vulnerability	.03	.705	-.14	.063	.01	.870	-.01	.947
Perceived respect	-.16	.093	-.02	.837	-.32	.000*	.10	.288
Body								
Physical frailty by ageing	-.03	.707	-.29	.000 *	-.01	.914	-.06	.481
Self-perception health status compared to older peers in prison	-.16	.078	-.36	.000 *	-.12	.166	-.18	.044 *
Physical safety – victimization by prisoners n	-.21	.023*	.06	.471	.11	.197	-.04	.665
Social								
Satisfaction with activities offered	-.42	.000*	-.32	.000*	-.22	.009 *	-.06	.461
Hours inside prison cell	-.01	.945	-.14	.066	.15	.078	.08	.384
Frequency visitors from outside	.08	.345	.02	.764	.15	.083	-.23	.009 *
Desire more visits from outside	-.12	.189	-.03	.725	-.19	.026 *	-.25	.005 *
Entire social isolation	-.09	.313	-.09	.233	.03	.706	-.44	.000 *
GFI (>0.9)	.901		.901		.901		.901	
CFI (> 0.9)	.907		.927		.907		.902	
RMSEA (<0.05)	.058		.058		.058		.058	
R^2	.36		.54		.43		.37	

* $p < .05$

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Appendix

List of independent of dependent and independent variables

Independent variables:

Concerning the independent variables listed hereafter, all categorical variables have been recoded into dichotomous variables according to the general principle 0= without problem and 1= existing problem.

SELF

Psychopathology was measured by a validated instrument, the Mini International Neuropsychiatric Interview (M.I.N.I. version 5.0.0 DSM-IV) (Sheehan & Lecrubier, 2006), that allows the interviewer to question the criteria of the axis I psychiatric disorders as defined in the DSM-IV (Diagnostic and Statistical Manual of Mental Disorders). Apart from the antisocial personality disorder, the M.I.N.I. is not designed to screen any other personality disorders (axis 2 in the DSM-IV).
0= No psychiatric disorder, 1= at least one psychiatric disorder.

Suicidal risk is included as a full item in the M.I.N.I., however according to the DSM-IV classification, suicidal ideation must be seen a criterion that makes part of a psychiatric diagnosis and not as a psychiatric disorder in itself. Therefore suicidal risk was considered as a distinct variable.
Dichotomization: 0= No suicidal risk at all, 1= suicidal risk was assessed (low – moderate – high).

Perceived agency was measured by the question ' I want to quit prison as soon as possible because I believe that I am still able to live a fulfilling life after incarceration' (four-point scale fully/partly agreement against fully/partly disagreement).
Dichotomization: 0= positively self-perceived ability to live a fulfilling life after incarceration (fully or partly), 1= negatively self-perceived ability to realize a fulfilling life after incarceration (fully of partly).

Perceived vulnerability was measured by the question 'How do you estimate that most of the other prisoners are perceiving you? To what extent does the next statement correspond to your situation? Other prisoners consider me as vulnerable' (four-point scale fully/partly agreement against fully/partly disagreement).
Dichotomization: 0= no self-perceived vulnerability towards other prisoners (not at all or partly), 1= expressed to be vulnerable towards other prisoners (fully or partly).

*Perceived resp*ect was measured by the question 'How do you think that most of the other prisoners are perceiving you? To what extent does the next statement correspond to your situation? I am still capable to enforce respect from other prisoners ' (four-point

scale fully/partly agreement against fully/partly disagreement).
Dichotomization: 0= can still enforce respect from other prisoners, 1= no or limited self-perceived capability to enforce respect from other prisoners.

BODY

Medical complaints were measured by the question 'Which of the following medical problems apply to your health status? A list of eleven predefined common age-related physical health issues was read out by the interviewer. Additional complaints were registered as well and recoded. Since there were no respondents without problems this variable distinguishes respondents with one medical issue against those with two or more.
Dichotomization: 0= maximum one medical issue, 1= at least two medical issues.

Physical frailty by ageing was measured by the subdomain 'physical frailty' of the Tilburg Frailty indicator (TFI) which is a validated instrument to assess the extent of frailty of older people consisting of eight yes/no questions (Gobbens et al., 2013) about general physical well-being, loss of weight, mobility (walking), balance vision, hearing, force in the hands and tiredness.
Dichotomization: 0= no physical frailty at all, 1= at least one indication of physical frailty.

Perceived health status compared to older peers was measured by the question 'How would you assess your own health status in comparison with your contemporaries in prison?' (the original question existed of three choices 'better', 'equal' or 'worse').
Dichotomization: 0= equal or better, 1= worse.

Physical safety- victimization by other prisoners – feelings of safety were measured by the question 'How safe do you feel in the company of other prisoners?' (four-point scale existing of safe, rather safe against rather unsafe, unsafe)
Dichotomization: 0= no or only limited feelings of unsafety, 1= feelings of unsafety were expressed.

Needs support ADL was measured by the question 'Would you prefer to receive more support for your daily activities'. This question was dichotomized originally.
Dichotomization 0= needs no more support, 1= needs more support.

SOCIAL

Feelings of loneliness were measured by the validated measurement tool *'De Jong-Gierveld Loneliness Scale (brief version)', consisting of 6 items on a 5-point Likert scale.* Originally dichotomized results (lonely versus not lonely) were calculated by a syntax that is online available at the website of the instrument ('Manual Loneliness Scale', n.d.)
Dichotomization: 0= not lonely, 1= lonely.

Satisfaction with activities was measured by two questions (1) 'Do you have enough activities during incarceration during week time?' ; and (2) a similar question for 'weekends'. Results of both questions were counted.
Dichotomization: satisfied with activities (in week and/or weekend), 1= 7/7 unsatisfied with activities.

Prison job was derived from the questions 'How much do you work in prison (paid job)? Number of days per week? Number of hours per day?'.
Dichotomization: 0= workers, 1= non workers (0 hours).

Hours inside prison cell was measured by the question 'How many hours per day do you spend in your prison cell, nights included'. A continuous variable was used.

Frequency external visitors was measured by the question 'How often do you receive visits?'
Dichotomization: 0= at least once per month, 1= Never or a few times per year at maximum.

Desire more external visits was measured by the question 'Would you like to receive more visits'. This question was dichotomized originally.
Dichotomization: 0= satisfied with amount of visits, 1= desires more visits.

Frequency personal conversations prison guards was measured by the question 'How often do you talk about personal matters with custodial staff?' (the original question contained five options: Daily, once in a week, once in a month, less than once in a month).
Dichotomization: 0= maintains conversations about personal issues with guards, 1= never has conversations about personal issues with guards.

Entire social isolation was measured by the question 'To what extent do you agree with the following statement about your social network? Actually, I have no significant social contacts anymore, nor inside nor outside prison.' (four-point scale fully/partly agreement against fully/partly disagreement).
Dichotomization: 0= Still maintains social contacts, 1= Entirely socially disconnected.

Dependent variables consisted of the scaled scores of the WHOQOL-BREF instrument, cf. methodology section.

Chapter 4

Needs and Quality of Life of older imprisoned offenders in Belgium

Based on:

De Smet, S., Vandevelde, S., Ryan, D., Verté, D., Broekaert, E., & De Donder, *Needs and quality of life of older imprisoned offenders in Belgium*. (under review)

Abstract

Older adults in prisons often manifest age-related physical and mental decline in addition to difficulties that already existed in their lives. One hundred and ten older prisoners in Belgium participated in structured oral interviews, among them 78 convicted prisoners and 32 prisoners deemed criminally irresponsible for their actions. Interview questions focused on physical, psychological, social and environmental characteristics including five standardized and validated instruments on (1) Quality of Life *(WHOQOL-BREF),* (2) age-related frailty *(TFI),* (3) mental health problems *(M.I.N.I. version 5.0.0 DSM-IV),* (4) loneliness *(De Jong-Gierveld Loneliness Scale), and* (5) cognitive functioning *(MoCA)*. Although nine in ten was under the age of 70 years, four in ten met the criteria of age related frailty. Physical health issues were highly prevalent and in a quarter of the cases suicidal ideation was reported. More than half of the respondents did not reach the required cut-off score for normal cognitive functioning. Severe loneliness and social deprivation were found in one third of the cases. Especially older offenders that were held irresponsible for their criminal actions appeared more institutionalized and more socially isolated. Despite the fact that safety prevails over care in prison settings, systematical exploration of difficulties in all four domains of QoL, is required.

4.1 Introduction

Internationally, there is considerable evidence of growth in the ageing population of sentenced prisoners. For example, in England and Wales, prisoners aged 60 and over are the fastest growing age group in the prison population (Hayes et al., 2012). In this respect, offenders entering the prison system for the first time later in lifetime, as well as prisoners with long sentences getting older while in prison, are reported to be hugely worrying trends (Collins & Bird, 2007).

The vast majority of publications about older prisoners emanate from the U.S.. This may be partly related to increased austerity in sentencing laws since the mid-1970's which is still applied in approximately half of the United States and which has contributed to the highest prison rate worldwide (Legalmatch, 2015). Nevertheless, the number of older prisoners is reported to be expanding in other countries such as Australia, Canada, and the UK as well (Davoren et al., 2015). As far as we are aware, international scientific publications about ageing prisoners in non-English speaking countries are not widely available. In this respect, it appeared that between 2003 and 2014, the number of prisoners in Flanders (the Dutch speaking part of Belgium) aged 60 years and over has steadily increased from 112 to 272, an increase of 142.8%, which is over five times higher than the increase of the general prison population (26.4%) in the same period (Federal Public Service of Justice, 2015).

Clearly, this growth in older offenders requires consideration of the health needs of this population including age-related physical decline, mental deterioration and functional impairment among this population in Western prison systems (Chiu, 2010). Especially in the U.S., it is widely believed that health related complications among older prisoners are associated with a harsher lifestyle that causes 'early ageing'. Within that context, several adverse conditions can be distinguished such as drug use, alcoholism, unhealthy housing, brain injuries, and poor eating patterns (Aday 2013). The general assumption that such factors contribute to 'accelerated ageing' among offenders has led to the common use of a lower age threshold to differentiate older offenders demographically. For example, in the U.S. imprisoned offenders are mostly considered as old from the age of 50 years, sometimes even lower. In European publications the age of 60 or 65 years is commonly applied (De Smet et al., 2010).

Older adults suffering from physical and mental health deterioration may be more vulnerable in prison settings that are often architecturally unsuitable and that are characterized by a skills profile of staff that is not specifically configured for such a population (Bretschneider et al., 2013). In practice, many older inmates may be more at risk to be victimized by other inmates or to have misunderstandings with guards (Fellner, 2012). Besides, older prisoners often bear the consequences of traumatic and stressful life events earlier in lifetime (Maschi et al., 2012). Severe mental health issues that already existed before or that may be advanced by the life circumstances in prison such as depression have been observed in half of the older imprisoned offenders (Fazel et al., 2001). Inappropriate physical and organizational environments may contribute to a

variety of common issues observed in prison environments such as feelings of loneliness, feelings of being unsafe, low self-determination, and lack of privacy (Liebling, 2014). Concerning life after incarceration, age-related decline may also reduce the chances on successful reintegration of ageing offenders into society (Williams & Abraldes, 2007).

Whether age-related or not, all aforementioned concerns may have an important influence on the offender's Quality of Life (QoL). In this respect, the concept of QoL is used in various fields in care provision such as (mental) health, disability and addiction services. It is recognized as well that having a good Quality of Life is an essential condition for the successful reintegration of criminal offenders (Ward et al., 2007). Therefore the concept of QoL is increasingly used as an important outcome indicator in addition to recidivism rates (Fitzpatrick et al., 2010). Although the number of studies using QoL as an outcome indicator in forensic contexts is still rather limited, recent studies have addressed this concept (Schel et al., 2015; Bouman et al., 2010), including among older prisoners (Hayes et al., 2013). It is generally accepted that one's QoL is influenced by the interplay of aspects linked to several domains of human life and that QoL consists of both objective and subjective elements (Cummins, 2005).

The World Health Organization (WHO) defines QoL as "*individuals' perceptions of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns*" (WHOQOL Group, 1989, p. 551). In order to measure QoL, the WHO developed a widely used instrument, the WHOQOL-100 that has been validated for many populations e.g. mental health clients (Masthoff et al., 2005). The shortened version, the WHOQOL-bref, that distinguishes between four domains: (1) physical QoL (2) psychological QoL, (3) social QoL, and (4) the environment, has been used in forensic populations as well (Saloppé & Pham, 2006).

Our study builds on previous research in European countries about the health needs and Quality of Life of older prisoners (Davoren et al., 2015; Hayes et al., 2013a; Hayes et al., 2012; Kingston et al., 2011). In their study on remand prisoners in Ireland, Davoren et al., (2015) found that older prisoners had a greater need of both general medical and psychiatric care as compared to younger offenders. More specifically, they reported high rates of affective disorders, alcohol misuse, cardiac and neurological disorders, psychotic illnesses, self-harm, vulnerability and victimization. Hayes et al., (2012, 2013) investigated health, social and custodial needs, and Quality of Life of older male prisoners in the North West region of England and found this population to display elevated prevalence figures with regard to physical and mental health problems, a finding which they report to be consistent with the results of earlier research (see Fazel et al., 2001; Fazel et al., 2004).

Because of the current dearth in scientific knowledge on older prisoners in non-English speaking countries in general, and in this case Flanders more in particular, this study presents the characteristics of older prisoners in Flanders. More specifically, the study sought to investigate the physical, mental, social and environmental needs related to the four domains as set out in the WHOQOL-bref-instrument (Skevington et al., 2004).

It should be noticed that in Flanders an important number of forensic patients is still incarcerated in penal institutions whereas according to the Belgian law, they belong in

secure forensic hospitals for care and treatment in conditions of therapeutic security (Van Assche, 2013). On April 1, 2014, the entire prison population in Flanders (n=5863) still included 681 untreated forensic patients (DGPI, 2014). From an international perspective, Belgian forensic patients can be defined as offenders who were deemed criminal irresponsible for their actions. Legally they cannot be convicted because of mental disorders such as psychiatric illnesses including psychopathy or intellectual disability at the time of the offence. In this respect, the Belgian law applies a dichotomized jurisdiction that may lead to conviction followed by 'punishment' on the one hand or the status of criminal irresponsibility on the other, that involves obligatory treatment until the patient is considered to be 'cured'. To date, the incarceration of forensic patients in Belgium has led to various convictions of the Belgian State by the European Court of Human Rights (Vandevelde et al., 2011.). Although the lack of available places in forensic hospitals is undoubtedly an unacceptable situation, it offers the opportunity to study differences between older convicted offenders who are judged responsible for their acts and older imprisoned forensic patients who should – as a consequence – be treated in care facilities instead of being incarcerated in penal institutions. Due to the elevated rates of psychosocial problems of older forensic patients reported in previous research (De Smet et al., 2016), we expected that the QoL of older imprisoned forensic patients would be lower when compared with their convicted counterparts.

4.2 Methodology

4.2.1 Setting

In Flanders, the entire population of prisoners aged 60 years and over consisted of 272 individuals at the time of data collection (reference date 4 February 2014). Both convicted prisoners (n= 134) and older imprisoned forensic patients (n= 72) were invited to participate in this study. In this publication we will label the older forensic patients as criminal irresponsible respondents in order to emphasize the difference with the convicted respondents. Remand prisoners (n=49) and prisoners being held on a custodial basis under specific regulations (e.g. being illegal or on basis of vagrancy) (n=17) were excluded.

The minimum age threshold of 60 years was applied which is in accordance with 'the agreed cut-off age for older persons' as defined by the World Health Organization (WHO) and the United Nations (UN) (Bretschneider et al., 2013 p. 268). Equally, the same cut-off age was used in a recently published study on older remand offenders in Ireland (Davoren et al., 2015).

4.2.2 Materials

Data was collected using a series of instruments administered by an interviewer within individual patient interviews. Interviewing as well as self-administered questionnaires

are a common method of data collection when considering lifestyle issues (Okamoto et al., 2002). The interviews were structured so as to collect data using 5 Dutch versions of standardized questionnaires as set out below. Furthermore, data was collected concerning custody and ageing issues and socio-demographic factors, their personal custodial trajectory, physical well-being, psychological well-being, perception of the life in prison.

World Health Organization Quality Of Life scale – brief version (WHOQOL-bref):
The WHO developed a shortened version of the WHOQOL-100 which is composed of 24 items on a 5-point Likert scale, that assesses four domains related to Quality of Life: physical health, psychological health, social relationships and environment. Furthermore, two separate items are included in the instrument; one that asks the respondents to estimate their overall Quality of Life and an additional item which asks respondents to provide an estimation of their general health (WHO 1995). The WHOQOL-BREF is a widely used generic instrument that is validated in various populations including forensic patients (Saloppé & Pham, 2006), mental health patients (Trompenaars et al., 2005) and older people (Hwang et al., 2003).

De Jong-Gierveld Loneliness Scale (brief version): This instrument is a shortened scale for the assessment of loneliness. The scale has 6 items (the original version had 11 items) on a 5-point Likert scale. Within this instrument, loneliness is conceptualized as comprising two principal elements: (1) 'emotional loneliness' or missing an intimate relationship and (2) 'social loneliness' or missing a wider social network (De Jong Gierveld & Tilburg, 2010).

Tilburg Frailty indicator (TFI): The use of the TFI in our study was restricted to part B - which consists of 15 questions about the presence or absence of physical, psychological and social frailty in older people. Using a cut-off score of 5, the risk of frailty later in lifetime can be scored independently from part A of the questionnaire. We decided not to use part A since it contains determinants that were covered in other questions (Gobbens et al., 2012).

Mini International Neuropsychiatric Interview (M.I.N.I. version 5.0.0 DSM-IV): The M.I.N.I. is designed as a brief structured oral interview for the major Axis I psychiatric disorders in DSM-IV and ICD-10. The instrument has been widely applied for research and clinical purposes (Sheehan & Lecrubier, 2006). Essentially, the assessment consists of a decision tree in order to investigate self-reported symptoms as pathological or not. In addition, an optional module for the antisocial personality disorder is provided, which was used in this study as well.

Montreal Cognitive Assessment (MoCA): Several neurological and systemic diseases are accompanied by cognitive impairment. The instrument screens several cognitive functions: visio-spatial / executive, naming, memory, attention, language, abstraction, delayed

recall and orientation. The instrument has been found useful to detect mild cognitive impairment in many conditions e.g. Alzheimer's disease, vascular cognitive impairment, Parkinson's disease, substance abuse, schizophrenia, head trauma' etc. (MoCA, 2015).

4.2.3 Procedure

The first author together with five co-researchers (trained students) from Ghent University and Ghent University College formed the cohort of data collectors within the research team.
The data collection team was trained in group sessions to ensure a uniform application of the interviews with specific focus on the use of the standardized instruments. In line with the recommendation of the developers of the M.I.N.I., all interviewers were trained by a Consultant Psychiatrist who was a Professor within Ghent University. Each of the older prisoners (n=208) was approached individually beforehand by a postal invitation. A detailed explanation of the aims and procedures was provided to participants in a comprehensible way. Simultaneously, staff members of the wards involved had been briefed about the course and purposes of the study. At the time of the data collection, each older prisoner was spoken to in person for a second time to ensure clarity and comprehension relating to the introductory letter and written invitation. Where agreement to participate was confirmed by the invitee, the interview was conducted immediately.
All interviews took place in private settings - either at the prison wards, normally in lawyers' consultation rooms or elsewhere in the prison buildings where privacy could be ensured. Informed consent forms were signed before the start of each interview and conversations were audio recorded. Most interviews took place during weekends since private conversation areas were not widely available from Monday through Friday and in that way interference with prisoners' activities on working days could be avoided as well. Between 1st of March 2014 and the 22nd of May 2014, a total of n=110 older prisoners had participated, which represents a response rate of 52.9%.

4.2.4 Data analysis

The duration of interviews varied between 40 minutes and up to more than two hours. Afterwards, data from the paper version of the questionnaires were entered in the electronic online survey program called 'Qualtrics' (Qualtrics 2016). The main advantage of this procedure was that answers were transcribed verbatim into the online version thus ensuring that the paper and electronic versions were entirely identical. This was done to reduce the chances of errors in data inputting as much as possible. In any case where there was lack of certainty or clarity in the paper version, the audio recordings were relied upon to ensure the correct input of answers. Each interviewer entered the answers of their own interviews. The entire data set of each respondent was automatically sent to the head researcher and converted simultaneously into a

data Qualtrics spreadsheet. This database was exported from Qualtrics into IBM SPSS, version 20.0 (SPSS, 2012).
Descriptive statistics (frequencies and crosstabulations) were applied to map the characteristics of the older prisoners. 70.9% (n=78) of the participants were convicted offenders and 29.1% (n=32) were deemed criminally irresponsible for criminal actions. Chi-square analyses were used to evaluate the differences between convicted respondents (CONV) and those that were deemed criminally irresponsible for their actions (CI-R) at a bivariate level. Differences in individual 'scales' (WHOQOL-BREF and TFI) between CIR and CONV were tested using Mann-Whitney U tests. All analyses were performed in SPSS 20.0 using a statistical significance threshold of $p<0.05$.

Ethical considerations

Ethical approval (B.U.N. 143201319442) from the Ethics Committee of the University Hospital of the Vrije Universiteit Brussel (Free University of Brussels) was obtained. The research project received authorization and practical support from the Belgian Federal Public Service for Justice to conduct this study.

4.2.5 Profile of Participants

The vast majority were male (92.7%, n=102), were of Belgian nationality (89.1%, n=98) and were 70 years or younger (90.0 %, n=99, range = 60 – 91 years, mean age = 65.2 years and SD= 4.8 years). At the time of the study, 41.8% (n=46) declared they had a partner, 75.5% (n=83) had children and 52.4% (n=55) had grandchildren. In terms of educational attainment, 19.1% (n=21), reported holding certificates at higher education (University or equivalent) level, whereas 37.3% (n= 41) had completed primary school only.
Nearly half (44.6%, n=49) of all participants had been incarcerated for the first time when they were aged over 45 years. A total of 15.5% (n=17) of all participants were incarcerated for the first time when aged over 60 years - with exactly the same number (15.5%, n=17) having been imprisoned for the first time when they were under the age of 26.
The mean length of uninterrupted incarceration for the current charges was 5.6 years with a range of 0 – 42 years (SD= 2.7 years). Some of the participants, 37.3%, (n=41) had spent less than 2 years in prison, while 14.5% (n=16) were imprisoned for at least 10 years. In the case of 6.2% of all participants (n=7), they had an average length of stay in prison of 20 years or more[1]. This means a total of 51.8% of these older prisoners were imprisoned for up to 10 years.

4.3 Results

Results are presented for each of the four domains of the WHOQOL-BREF questionnaire related to Quality of Life (physical health, psychological health, social relationships and environment). Statistically significant differences between convicted respondents

1 This information was provided by DGPI

(CONV-R) versus those deemed criminally irresponsible **(CI-R)** are identified in the tables by "***" and are also mentioned separately at the end of each sub-section.

4.3.1 Physical health

Table 1 shows that half of the participants smoked on a daily basis (49.7%). Nearly one third (29.1%) admitted frequent and excessive alcohol abuse prior to incarceration, which was in contrast to the low prevalence of previous abuse of other substances including drugs (7.3%). Furthermore, in table 1, self-reported physical health issues which were active at the time of interviewing are listed and likewise, the participants also declared whether or not they were receiving medical treatment for these complaints. In descending order, the three most frequently self-reported physical complaints were heart problems (40,9%, n=45), hypertension (30.0%, n=33) and musculoskeletal pain (30.0%, n=33). Remarkably, medical treatment for musculoskeletal pain was reported as being far less available when compared to treatment for other complaints. 81.8% (n=90) of the older prisoners stated they were taking medication, however it should be noted that in the original question no unequivocal distinction was made between physical and mental health indications.

Table 1. Physical health of older imprisoned offenders (n=110)

Self-reported physical health issues	%	N
Addiction		
Daily smokers at current time	49.7	55
Alcohol abuse before incarceration	29.1	32
Drug abuse before incarceration	7.3	8
Complaints and medical treatment		
Heart disorders (excl. hypertension)		
Complaints	40.9	45
Received treatment	31.8	35
Hypertension		
Complaints	30.0	33
Received treatment	27.3	30
Musculoskeletal pain (Rheumatism, painful joints…)		
Complaints	30.0	33
Received treatment	17.3	19
Respiratory disorders (asthmatic etc.) excl. Lung cancer		
Complaints	18.2	20
Received treatment	12.7	14
Diabetes		
Complaints	16.4	18
Received treatment	15.5	17
Medication		
number of patients taking medication (indication non-specified)	81.8	90

Convicted Older Prisoners and Older Prisoners deemed Criminally Irresponsible for their actions – Physical health differences

No statistically significant differences emerged between CONV-R and CI-R in relation to any of the aforementioned physical health issues.

4.3.2 Mental health and cognitive functioning

Mental health

Table 2 presents the mental health condition of the participants in the past as well as at the time of interviewing. Nearly one third (29.1%, n=32), declared that they had been experienced psychological abuse (e.g. repeated bullying, threats or humiliation) in their youth (< 18 years). Furthermore, frequent physical abuse (violence, physical punishments etc.) was reported by 26.4% (n=29) of the participants, whereas sexual abuse occurred in 22.7% (n=25) of the cases. Likewise 29.1% (n=32) of respondents had been removed from their family environment and placed in institutional care (e.g. child protection, reformatory etc.) during childhood. It also appears that 27.3% (n=30) of the respondents had been admitted to a psychiatric hospital during adulthood at least once.

At the time of the interviews, 31.8% (n= 35) of the respondents reported that they were being treated by psychotropic medication. The five most frequently mentioned categories of pharmaceutical agents used were sleep medication (18.2%, n=20), painkillers (10.9%, n=12), anxiolytics (9.1%, n= 10), antidepressants (6.4%, n= 7) and neuroleptics (4.5%, n=5). Based on the results of the M.I.N.I.5.0, it appeared that 14% (n=15) of the participants met the criteria for a depressive episode at the time of the study. In addition, it was found that more than a quarter of all participants (26.2%, n=28) appeared to be at risk for committing suicide. Other frequently assessed psychiatric disorders are listed in table 2.

Cognitive functioning

The results of the MOCA demonstrated that more than half of the participants (55.3%, n=52) did not reach the cut-off score of normal cognitive functioning of 26/30. It should be noticed that in cases where participants had a 'low level' of education the total score was corrected, according to the instructions of the MoCA.

Table 2. Mental health and cognitive functioning of older imprisoned offenders

Abuse at younger age	%	N
Psychological abuse	29.1	32
Physical abuse***	26.4	29
Sexual abuse	22.7	25
Placement in institutional youth care	%	N
Experienced institutional care during childhood***	29.1	32
Admissions in psychiatric hospital	%	N
At least one admission in a psychiatric hospital***	27.3	30
Psychopharmacologic treatment	%	N
Older prisoners under psychopharmacological treatment	31.8	35
Type of psychotropic medication		
Sleep medication	18.2	20
Pain reliever	10.9	12
Anxiolytics	9.1	10
Antidepressants	6.4	7
Neuroleptics	4.5	5
Mental health issues measured by M.I.N.I.*	%	N
Suicide risk	26.2	28
Low	15.9	17
Moderate	2.8	3
High	7.5	8
Depressive episode at current	14.0	15
Antisocial personality disorder	12.1	13
Dysthymia	12.1	13
Pain disorder	8.4	9
Psychotic disorder		
- in lifetime	8.4	9
- at current	6.5	7
Post-traumatic stress disorder	4.7	5
Cognitive functioning measured by MoCA **		
Below cut-off score for normal cognitive functioning (≤26/30)	55.3	52

*N=107 completed the M.I.N.I.

** N=94 completed the MoCA

***= statistical significance between convicted offenders and criminally irresponsible offenders

Convicted Older Prisoners and Older Prisoners deemed Criminally Irresponsible for their actions - differences in mental health & cognition

We found that CI-R had experienced twice as much physical abuse in their youth (40.6%, n=13) when compared to the CONV-R (20.5%, n=16) (X^2= 4.563, df=1, p= 0.023). Furthermore CI-R had spent significantly more time in institutional care (43.8%, n= 14) during childhood compared to CONV-R (23.1%, n=18), (X^2=4.69, df=1, p=0.031). Equally, CI-R (43.8%, n=14) had been admitted to psychiatric hospitals twice as often during their lifetime compared to CONV-R (20.5%, n=16) (X^2=5.27, df=1, p=0.013). Concerning the mental health disorders screened by the M.I.N.I., no statistically significant

differences between CI-R and CONV-R emerged. Based on the self-reported intake of psychopharmacological treatments, no statistically significant differences emerged between both groups.

4.3.3 Social network

Table 3 demonstrates that 56.4% (n=62) of the participants received visits at least once per month from people from outside prison. However, for 15.5% (n=17) of all participants such visits were limited to a few times in a year and nearly one third (28.2%, n=31) never received visitors. If participants were visited, 41.8% (n=46) had visits from friends, 31,8% (n=?) from partners, 30,0% (n=33) from children and 10,9% (n=12) from grandchildren. In 7.3% of cases, it was their own parents who were visiting them (n=8). Furthermore visits from priests (11.8%, n= 13) and volunteers (4.5%, n=5) were reported.
Exactly one fifth (20.0%, N=22) of all participants declared that they did not maintain any social contacts either inside or outside the penal system. According to the De Jong-Gierveld loneliness scale, nearly half of the older prisoners (47.2%, n=51) could be categorized as 'moderately lonely' and exactly one third of all participants (33.3%, n=36) were considered as 'severely lonely'. With respect to the dimension of emotional loneliness, more than half of the participants (54.6%, n=59) were assessed as lacking an intimate relationship, whereas the item measuring social loneliness revealed that 51.9% or n=56 did not have a wider social network.

Table 3. Social Network & Loneliness

Kind of visitors from outside	%	N
Friends and acquaintances	41.8	46
Partner	31.8	35
Children	30.0	33
Priest	11.8	13
Grandchildren	10.9	12
Parents	7.3	8
Volunteers	4.5	5
Partnership	%	N
Those with a partner outside prison ***	41.8	46
Frequency of visitors from outside	%	N
At least once per month***	56.4	62
A few times per year***	15.5	17
Never***	28.2	31
Perception quality social network *	%	N
Participants who made close friendships with other prisoners	37.2	41
Participants who maintain close relationships with people from outside prison	60.9	67
Participants who lost all connections with people from outside prison but who maintain close relationships inside prison with other prisoners and staff	30.9	34
Participants without any valued social relationships, neither in- or outside prison***	20	22

Loneliness measured by the *De Jong-Gierveld scale***	%	N
Overall loneliness		
moderate	47.2	51
severe	33.3	36
Emotional loneliness	54.6	59
Social loneliness	51.9	56

* statements were asked independently from each other**N=108 completed the DJG loneliness scale

***= statistical significance between convicted offenders and criminally irresponsible offenders

Convicted Older Prisoners and Older Prisoners deemed Criminally Irresponsible for their actions – Differences in terms of social deprivation

CI-R appeared significantly more socially deprived in several respects compared to their convicted peers. In the case of those offenders who were frequently visited (at least once per month) the proportion of CI-R was only half compared to of CONV-R (CI-R=37.5%, n=12 versus CONV-R = 64.1%, n=50 (X^2= 5.75, df=1, p=0.011)). On the other hand, in the category of respondents that never received visitors or only a few times in a year at most, the percentage of CI-R was almost double compared to the CONV-R (CI-R=62.5%, n=20 versus CONV-R = 35.9%, n=28 (X^2= 6.04, df=1, p=0.011)). A total of 12.8% (n=10) of CONV-R that reported a lack of any social network in life (either in or outside prison) was three times lower in comparison with CI-R (37.5%, n=12) (X^2= 5.60, df=1, p=0.003). Equally, the number of CI-R that reported having a partner was three times lower compared to CONV-R(CI-R=15.6%, n=5 versus CONV-R=52.6%, n=41) (X^2=8.38, df=1, p=0.000).

4.3.4 Prison environment

In table 4, features inherent to the prison environment are presented.

Manifestations of institutionalization

Of all the respondents, 14.5% (n=16) were incarcerated continually for 10 years or more. Nearly one fifth of the participants (n=21) declared that they were feeling anxious about the prospect of release from prison and nearly 15% (n=16) stated that if the decision was left to themselves, they would prefer to continue their life in detention until death. Nearly half (n= 51) of the respondents did not leave their cells during for at least twenty hours each day. Equally, it should be noted that 40% (n=44) of the respondents shared a cell with at least one other prisoner.

Manifestations of victimization:

Nearly a quarter of all respondents (24.5%, n=27) expressed feelings of low self-confidence in the sense that they considered themselves as incapable of gaining respect from other prisoners. During the last year, about one fifth of the participants had been a victim of both blackmailing (21.8%, n= 24) and harassments (20%, n= 22) and nearly 15% (n=17) had lost personal property by theft. More than one in ten (11.8%,

n=13) had been confronted with physical violence. Sexual abuse (either actual or in the form of threats) was reported only once.

Relationships with prison officers

The majority of the respondents (57.5%, n=63) perceived their contacts with prison-officers as being simultaneously respectful but superficial, whereas 40% (n=44) considered their relationship with prison-officers as personal and trusting. Overall problematic relationships with officers appeared to be relatively low (2.7%, n=3).

Table 4. Environment

Institutionalization	%	N
10 years or more of uninterrupted incarceration ***	14.5	16
Anticipatory feelings of anxiety relating to release ***	19.1	21
Personal preference to stay imprisoned until death ***	14.6	16
Stays inside the cell for at least 20h/24h***	46.3	51
Victimization by other prisoners (last year)	%	N
Self-confidence – incapable of gaining respect from others prisoners	24.5	27
Blackmail/threats	21.8	24
Harassment	20.0	22
Theft	14.5	16
Violence	11.8	13
Sexual abuse	0.9	1
Overall perception of the relationship with prison officers		
Getting along well – trusting relationship	40.0	44
Distant but respectfully – no personal relationship	57.3	63
Problematic – mutual distrust	2.7	3

***= statistical significance between convicted offenders and criminally irresponsible offenders

Convicted Older Prisoners and Older Prisoners deemed Criminally Irresponsible for their actions – differences in terms of environmental experiences

In the category of respondents that had been incarcerated continually for 10 years or more, CI-R were proportionally represented three times more than CONV-R. (CI-R= 28.1%, n=9, CONV-R=9.0%, n=7) (X^2=4.34, df=1,p=0.001). Similarly, it appeared that anticipatory fear relating to release was three times higher among CI-R (CI-R=37.6%, n=12 compared with CONV-R=11.6%,n=9) and three times higher in relation to the wish to continue living in prison until their death, (CI-R= 28.2%, n=9, CONV-R=8.9%, n=7, X^2=4.345, df=1, p=0.009). Significantly more CI-R (65.7%, n=21) stayed in their cells for at least 20 hours/24 hours when compared to CONV-R (38.5%, n=30) (X^2=6.16, df=1, p=0.009). In this context, it is worth mentioning that more than one in ten older prisoners (13.6%, n=15) usually stayed 24/24 in their cells (this figure is not showed in the table).

4.3.5 Frailty

The TFI-instrument defines frailty in ageing populations by a cut-off score of ≥ 5. It appeared that 38.5% of respondents (n=109) in this study were categorized as frail.

Convicted Older Prisoners and Older Prisoners deemed Criminally Irresponsible for their actions – differences in results TFI (age related frailty)

No significant statistically differences between CONV-R and CI-R respondents were found.

4.3.6 Quality of Life

In order to provide some comparative context table 5 presents the WHOQOL-bref scores of male respondents in the age-group of 60-69 years within the current study alongside those of a normative population in society within the same age range which was published by Hawthorne (2006). This reveals that the imprisoned respondents have lower scores in relation to social and environmental Quality of Life domains which are statistically significant. In the physical domain, imprisoned respondents seem to score better and in the psychological domain the difference is limited, however in both cases no statistical significance emerged.

Table 5. Domain scores WHOQOL-brief male offenders between 60-69 years against male citizens between 60-69 years in the community

Domain	N prison	N Ref.	Mean prison	Mean Ref.	95% CI prison	95% CI Ref.	SD prison	SD Ref.
Physical	91	79	75.0	69.7	70.5 – 79.6	65.0–74.4	21.8	20.9
Psychological	90	79	67.7	70.3	63.8 – 71.6	66.6–74.0	18.6	16.7
Social	89	79	55.1***	68.6***	50.2 – 60.1	64.2–73.0	23.6	19.5
Environmental	90	79	63.5***	76.0***	59.9 – 67.0	73.2–78.8	17.1	12.3

***= statistical significance between older imprisoned offenders and older adults in the community

Convicted Older Prisoners and Older Prisoners deemed Criminally Irresponsible for their actions – differences in domain scores and general perceptions of QOL and Health WHOQOL-bref

None of the p-values in table 6 demonstrate statistically significant differences between the results of CONV-R versus CI-R.

Table 6. Domains scores WHOQOL-bref convicted versus criminal irresponsible respondents

Domains	Convicted Older Prisoners						Older Prisoners deemed Criminally Irresponsible for their actions						
				Percentiles						Percentiles			p-value*
	N	Min	Max	25	50	75	N	Min	Max	25	50	75	
Physical	77	14.29	100.00	60.71	78.57	92.81	32	14.29	100.00	58.03	73.21	89.28	0.357
Psychological	77	16.67	100.00	50.00	70.83	79.16	31	12.50	87.50	58.33	70.83	83.33	0.605
Social	76	0.00	100.00	35.41	58.33	75.00	30	0.00	100.00	25.00	50.00	66.66	0.128
Environmental	77	12.50	100.00	53.12	65.62	76.56	31	18.75	93.75	40.62	59.37	68.75	0.154
General QoL	77	0.00	100.00	25.00	75.00	75.00	32	0.00	100.00	25.00	75.00	75.00	0.903
General Health	77	0.00	100.00	50.00	75.00	100.00	32	0.00	100.00	25.00	75.00	75.00	0.182

*Mann-Whitney U test for difference between CONV-R and CI-R

4.4 Discussion

We found that the prevalence of self-reported *physical needs* was high (table 1). However, it also emerged that the respondents reported a mismatch between the physical conditions they reported and the treatment they were receiving. The use of medication seemed particularly high – with more than 80% of the respondents taking medication on a daily basis. Equally important was the finding that half of the respondents were smoking daily.

Nearly 40% of the respondents were categorized as 'frail' related to the ageing process by the TFI. Within the context that the respondents were relatively young on average, this seems to support the assumption of "early ageing" in this population (Chiu, 2010). Therefore, it is remarkable that according to the WHOQOL-BREF older prisoners had better scores in the physical domain compared to their peers in society. It seems that life in prison may be physically less demanding than in society. Accordingly, this could mean that older prisoners systematically overrate their subjective physical condition due to the physical restrictions that are inherent to prison life.

The results in the *mental health domain* (table 2) revealed that a considerable number of participants had experienced stressful and traumatic events during childhood. Likewise, nearly one third had been admitted to a psychiatric institution earlier in their lifetime. One third of the respondents was on psychopharmacological medication at the time of our inquiry. However, there seems a considerable discrepancy between low rates of antidepressant medication prescribed and high rates of depression measured by the M.I.N.I. Moreover, suicidal ideation was found in about a quarter of the sample. However, it has been reported earlier that many older prisoners prefer not to draw attention to themselves and rather tend to suppress their mental health suffering and even if they do complain, less attention is paid to mental health issues compared to younger prisoners (Owers, 2004). According to the results of the MoCA more than half of the older prisoners in this study scored below the cut-off score for normal cognitive functioning. Similar to what Kingston et al., (2011) stated earlier for the Mini-Mental State Examination

(MMSE), another often used screening instrument for cognitive disorders in ageing populations, it is neither clear to what extent the MoCA is a valid instrument for use in prison settings and to what extent this might necessitate another threshold for the cut-off score. Apart from this consideration, our findings might give rise to new questions for future research. For instance, how should effects of bias caused by non-response be considered? Likewise, what are the effects of performance anxiety, feelings of shame or fear in relation to cognitive deterioration? How can intellectual disability that remained unnoticed be differentiated from any initial manifestations of dementia? To what extent does brain damage influence the results of cognitive screenings such as severe alcohol abuse (50% in our study) or physical brain injuries? The same needs to be considered in relation to the current intake of psychotropic medication and likewise this point applies to severe mental health problems (e.g. depression and psychosis). What is the influence of exposure to a long-term monotonous life in prison on the cognitive functioning?
In the *social domain* our findings indicated that one third of respondents suffered from severe loneliness and the same number was almost or even totally socially deprived of contacts with people from the outside world.
Nearly half of the participants reported about their *environment* (table 4) that they were mainly living in their cells over 24 hours each day. Up to one in five of the respondents had been victimized by other prisoners during the last year of their incarceration. One fifth of the respondents was anxious about their release and 15% of respondents explicitly wanted to stay in prison until death.
Generally most of these findings turned out to be consistent with the scores that we achieved by means of the standardized assessment of QoL by the WHOQOL-BREF. In comparison with a normative home dwelling reference group of similar age, the imprisoned respondents in this study demonstrated lower scores in the psychological, social and environmental domains. Conversely, we observed that the imprisoned population scored better than their peers living at home in relation to the physical domain. According to our standardized investigation of frailty in ageing populations (TFI) we found that nearly 40% of imprisoned respondents could be considered as frail. This study revealed that the needs of criminally irresponsible offenders in terms of the social, psychological and environmental domains were even higher compared to those of the convicted offenders.

Limitations and strengths

The main strength of this study was the ability to collect data with this population by means of structured oral interviews. The validity and reliability of our results was substantially strengthened by the combined use of validated screening instruments and a closed questionnaire that was specifically designed to address topics about life in prison and the ageing process.
The main limitation in this study is related to its descriptive nature and relatively limited number of participants. Therefore, while the findings identified many adverse situations in the life of older prisoners and found relationships between being older

and domains of Quality of Life, the findings are not sufficiently robust so as to prove causal relationships between the adverse situations and the process of ageing, also due to the cross-sectional nature of the study. In this respect future longitudinal studies in which findings between older and younger prisoners could be compared, would be recommended. However, it must be noted that age-specific topics are inherently less relevant to younger offenders and thus some aspects such as dementia would clearly not be comparable. Concerning non-age specific items it should also be noted that the age variance of the respondents in our study was small (90% belonged to the age-group of 60-69 years). Although this kind of condensation is notably dissimilar from the normal demographic distribution in society it accords well with the demographic variance in comparable studies on ageing prison populations. Future research in which ageing imprisoned populations would be compared with similar age cohorts in society would be appropriate as well.

Another limitation in this study which relates to the relatively small number of respondents is the fact that the study was undertaken across several geographically diverse prison settings. While they would serve a similar function, it is also possible that the ethos and culture within differing settings will also differ, which may influence environmental factors. Nevertheless, from a research perspective the response rate for this type of data collection in prison settings can be considered as satisfactory. Yet, from a clinical perspective it is likely that the non-response group partly comprised individuals that were physically or mentally incapable of participation.

Interpretation and implications for care policy in prisons

Based on our results we recommend systematic screening of older prisoners for the presence of problems and potential risks concerning the four domains of QoL. Similar to Hayes (2013b), we suggest the introduction of a routine monitoring system from entry in prison until discharge. Special attention should be given to those issues that may remain undetected by the contemporary professional care system in penal systems, such as cognitive deterioration, chronic physical problems, suicidal thoughts and loneliness. Such data is essential for the remaining lifetime of ageing prisoners irrespective of whether they live inside or outside prison.

As in most other countries, Belgian prisoners retain their right to an equal standard of healthcare level as everyone else in society. However in the Belgian prisons several shortcomings have been described in custodial care provision that are caused by such factors as the understaffing of services by medical doctors and nurses among other issues (Van Mol, 2013).

We found that the prevalence of physical complaints was not always matched by the treatment provision. Taking the aforementioned understaffing into account, it might be assumed that certain health problems cannot be discovered adequately in early stages or that certain complaints are not further examined systematically all the time. However, underdetection is not only a specific Belgian issue, slow onset age-related medical problems such as dementia, osteoporosis, sensory impairment etc. often

remain unnoticed in prison settings elsewhere as well e.g. U.S. (Williams et al., 2014). In this respect we agree with the recommendation in the report on older prisoners in England and Wales p 36 in which is stated: '*Each healthcare center should have a lead nurse or manager, with sufficient seniority and knowledge, who has responsibility for the overall care of older prisoners.*' (Owers, 2014)

Notwithstanding that the provision of healthcare in prison does not always match those provided outside prison, it must be noted that socially disadvantaged offenders still may benefit from the free medical services that are offered during incarceration. More than half of the respondents were daily smokers and one in five experienced respiratory problems. In Belgian prisons smoking in the cells is allowed, whereas other counties such as Canada and New-Zealand banned smoking years ago. Likewise, England and Wales are currently rolling out a long term implementation plan to develop smoke free prisons. In this respect, an important consideration appears to be the exposure of prison staff to second-hand smoke in prisons (National Offender Management Service, 2015). In addition to implications for staff members in the Belgian context, the implications of second-hand smoking should be taken into account for prisoners, knowing that half of the ageing respondents hardly leave their enclosed cells and more than 40% of respondents in this study shared their cells at least with one other prisoner.

Medication intake (which appeared very high in this study) should be monitored closely. In the long term polypharmacy is a particular risk for older adults because of age-related changes in metabolism, clearance as well as increased risk of and dangers from side-effects such as delusions, falls, concentration problems etc. (Williams et al., 2014).

Although Belgium is currently taking measures to remove all criminally irresponsible offenders from penal institutions, this requires new infrastructure and transition. Clearly, rectifying the legacy issues relating to the identified deficits in current forensic treatment facilities will need time. Therefore, during the period of transition, special attention should be given to the specific needs of the most vulnerable criminally irresponsible offenders that are waiting for their relocation to alternative and more appropriate facilities e.g., older sex offenders; particularly pedophiles, ageing persons with intellectual disabilities or physical dependent older offenders.

According to our findings it can be assumed that a considerable number of older prisoners may still have unresolved issues related to traumatic experiences and stressful life events in their youth. In this respect we support the recommendations of Maschi et al., (2011) that these issues should be addressed as a matter of urgency- both for those that are preparing for release as for those with long sentences left to serve. Caregivers should be aware that older prisoners may be vulnerable for victimization during incarceration. Special attention should be given to signs of despair and resignation among older prisoners such as suicidal thoughts, institutionalization (e.g. the wish to stay in prison forever, enduring retreatment in the own cell), and extreme feelings of loneliness.

4.5 Conflict of interest declaration

None declared.

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Chapter 5

Treatment and control: A qualitative study of Older Mentally Ill Offenders' perceptions on their detention and care trajectory

Based on:

De Smet, S. , Van Hecke, N., Verté, D., Broekaert, E., Ryan, D., & Vandevelde, S. (2015). Treatment and control: a qualitative study of older mentally ill offenders' perceptions on their detention and care trajectory. *International Journal Of Offender Therapy And Comparative Criminology*, 59(9), 964–985.

Abstract

The life of older mentally ill offenders (OMIOs) is often characterized by successive periods of detention in correctional facilities, admissions to psychiatric services, and unsuccessful attempts to live independently. Through in-depth interviews, eight personal stories from OMIOs under supervision of the commission of social defense in Ghent (Belgium) were analyzed in the phenomenological research tradition. The results of the study reveal that OMIOs had more positive and less negative experiences in prison settings when compared with other institutional care settings. Independent living, unsurprisingly, is favored the most. This may be due to the fact that the latter option fosters personal competence, feelings of being useful, personal choices, and contact with the "outside" world. Even in later lifetime, a combined approach of risk assessment with improvement of well-being remains valuable to stimulate offender rehabilitation. Therefore, more research into concepts that could be used to support OMIOs needs further consideration.

5.1 Introduction

Most Western European countries apply the legal principle of providing mandatory psychiatric treatment instead of incarceration for mentally ill offenders that have been judged as not being legally responsible for their offences (Melamed, 2010). However, the provision of mandatory forensic psychiatric care is problematic in several respects. Dressing and Salize (2009) questioned experts in 24 European countries about the mental health care in prison as well as about the availability of the subsequent forensic psychiatric care pathways that were provided for mentally ill offenders. In two thirds of the countries, shortcomings were revealed, including a lack of provision of psychotherapeutic treatment programs, a lack of sufficient beds for psychiatric inpatient settings and appropriately trained staff, insufficient mental state screening examinations, deficient or absent psychiatric aftercare, underfunding, and poor integration with the general health systems.

5.1.1 Rehabilitation of offenders

Recent publications on the rehabilitation of (mentally ill) offenders underscore the importance of targeting the treatment and care of such offenders, rather than (only) focusing on risk reduction or punishment. The Good Lives Model (GLM), a strengths-based rehabilitation model developed by Ward et al. (Ward & Brown, 2004; Ward, Yates, & Willis, 2012) is a promising theoretical framework in this respect, because of its focus on the offender's personal hopes, Quality of Life and well-being, while at the same time addressing the offender's criminogenic needs (Ward et al., 2012). The GLM starts from the assumption that if offenders can lead valued lives, in which they can pursue their goals and dreams in non-criminal ways, the risk on recidivism decreases. Therefore, offenders should be supported in how to live a "good" life, addressing their personal strengths as well as environmental conditions. From that perspective, the GLM focuses on underscoring the human agency of offenders, while at the same time considering the importance of ensuring safe environments and communities. How to ensure that offenders can lead a fulfilling life while respecting the safety of the community they live in, is an important question (Willis, Yates, Gannon, & Ward, 2013).

5.1.2 Aging in Older Mentally Ill Offenders (OMIOs): some characteristics

Promoting the living of a "valued" life among OMIOs is made more complex because of the interplay between their offending behavior and the more usual physical, mental, and social needs that are associated with the aging process. Although most research focuses on the situation in the United States (Fellner, 2012), aging in mentally ill offenders is currently recognized as a global problem (Aday, 2013). Contrary to their incarcerated peers who are not subject of mandatory forensic psychiatric care,

the characteristics of OMIOs have been studied to a much lesser extent. Moreover, the available studies are characterized by some conceptual and methodological difficulties. The first problem involves the definition of a distinctive age threshold. Equally, whether and to what extent the assumption of accelerated aging should be taken into consideration seems a recurring problem (Yorston & Taylor, 2006). Second, the occurrence of mental health problems may or may not be related to increasing age and often appears to be inseparable from psychiatric and criminal antecedents. In this respect, several researchers have demonstrated a high prevalence of chronic and prior mental health problems, including psychotic disorders, severe alcohol abuse, depression, and co-morbidity (Coid, Fazel, & Kahtan, 2002; Farragher & O'Connor, 1995; Lewis, Fields, & Rainey, 2006; McLeod, Yorston, & Gibb, 2008; Rosner, Wiederlight, Harmon, & Cahn, 1991). Referring to a case report of Dinniss (1999) about a violent murderer with dementia, it may be assumed that age-related cognitive disorders are an underestimated element in the forensic evaluation of older offenders. Fazel and Grann (2002) and McLeod et al. (2008) reported respectively that 12.4% (n = 12, age cutoff = 60) and 8.6% (n = 3, age cutoff = 55) suffered from dementia. Furthermore, Curtice, Parker, Wismayer, and Tomison (2003) found dementia in 19% (n = 6, age cutoff = 65) of the referrals to a medium security ward. Compared with the imprisoned population, physical deterioration among OMIOs seems even less well researched. Nevertheless, increased vulnerability due to the prevalence of physical illnesses has been reported (Rayel, 2000) and functional impairment such as mobility and hearing problems seem to be frequently present as well (Curtice et al., 2003). O'Sullivan and Chesterman (2007) indicate that the majority of OMIOs grow older while detained within secure services and that only a minority of them committed serious offences when aged 60 years or older.

5.1.3 A detention and care trajectories of OMIOs

Lightbody, Gow and Gibb (2010, p. 973), described OMIOs as "a small but significant population with heterogeneous and complex needs" and in addition, several authors have formulated recommendations toward a more tailored care approach for OMIOs (Coid et al., 2002; Curtice et al., 2003; Dinniss, 1999; Lightbody et al., 2010; McLeod et al., 2008; O'Sullivan & Chesterman, 2007; Tomar, Treasaden, & Shah, 2005; Rayel, 2000). The need for an early mental health assessment, particularly for age-related cognitive mental disorders and physical problems is warranted. Rayel (2000) found that 59% of the OMIOs in a maximum-security forensic hospital had been previously hospitalized in psychiatric institutions and analogously McLeod et al. (2008) found that this was the case for 54% of them. Therefore, it can be assumed that a considerable number of OMIOs have a long and varied trajectory of incarcerations, releases, probations, and (forensic) psychiatric care. Yorston and Taylor (2006) suggested that a range of facilities in the criminal justice and health services should be developed to avoid mentally ill offenders ending up in inappropriate facilities. Most studies up until now have focused on the

investigation of characteristics of the OMIOs as a population. Less attention has been given to the personal perspectives of the OMIOs themselves. In this respect, Yorston and Taylor (2009) questioned older patients in an English high-security hospital by open qualitative interviews to discover how the OMIOs themselves perceived their current admission. However, to our knowledge no qualitative study has yet been undertaken with regard to the OMIOs perspectives about their entire trajectory encompassing the past as well as their current situation.

5.2 Aims

This study aimed at analyzing OMIOs' self-perceptions about their care and detention trajectory and is therefore grounded in a phenomenological approach, in which personal lived experiences of everyday life are the central focus (Finlay, 2009). Utilizing the principles of phenomenological research is consistent with the work of Schroeder (2013, p. 30), who undertook a study on older mentally ill patients and argued that "listening carefully to the narratives of older seriously mentally ill adults, gaining insight into their personal interactions with healthcare providers, and understanding their successes or frustrations may be a critical step in improving their health status." Phenomenological research seeks to describe and understand the world through the eyes of the persons involved and aims to shed a new light and to develop new insights into how situations have been thought of up until then (M. E. Johnson, 1998). Therefore, this study focuses on the care trajectories of 8 OMIOs and more specifically on the way OMIOs personally perceive these trajectories in the light of their past and future life.
The research questions are the following:
Research Question 1: What is the care trajectory of the OMIOs?
Research Question 2: How did the OMIOs experience their care trajectory?
Research Question 3: Have the OMIOs experienced any form of exclusion at any stage in their care trajectory?
Research Question 4: How do the OMIOs see their future and what are their perceptions of what could improve their situation?

As there are only a limited number of studies on care trajectories, the Flemish situation will be used as a case that is particularly worth considering as many of the older offenders—due to the Belgian legal system—have ended up in prison after complex and often long-term care trajectories (Mary, Kaminski, Maes, & Vanhamme, 2009).
Furthermore, the study seeks to explore a novel issue in forensic research, identifying absent knowledge to stimulate and guide future research. Therefore, the findings will be discussed in relation to the available international literature and implications for practice and future research possibilities with regard to older offenders in the forensic field will be presented.

5.3 Method

5.3.1 Ethical considerations

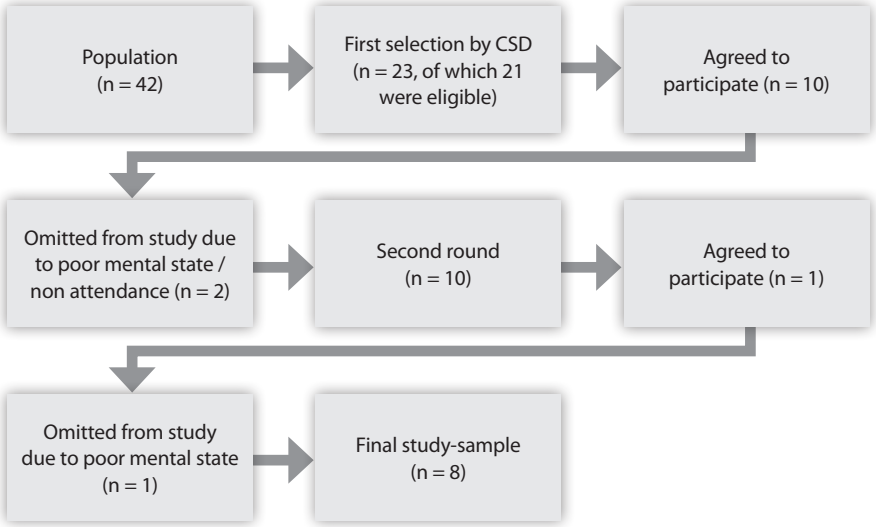
Ethical approval for the study was obtained from the Ethics committee of the University Hospital Vrije Universiteit Brussel (Free University Brussels, EC decision: B.U.N.143201112119).

5.3.2 Setting and participants

The study was undertaken in Flanders, Belgium. Under Belgian law, the "measure of internment" is applied to mentally ill offenders that are not considered responsible for their crimes. This is considered as a means of upholding the general principle of protecting society, while simultaneously providing appropriate psychiatric care and is similar to the treatment of mentally ill offenders in most other countries. However, Belgium applies a dichotomized model in which offenders are declared either responsible or irresponsible. According to Belgian law, the duration of internment is undefined and remains enforceable until the offender's mental health problems are resolved (Vandevelde et al., 2011).
The number of interned mentally ill population in Flanders is estimated to be 1,962 (as of February 2011, cited in Moens & Pauwelyn, 2012). Within that, 40% lived in prison, the others (60%) were either on probation, were treated in care facilities such as psychiatric hospitals, or living at home whether supported by domiciliary care services. Based on the results of a retrospective file study carried out in 2011 by the first author of this article, 174 OMIOs aged 60 years and over in Flanders were identified, which corresponds to about 9% (174/1,962) of the interned population at that time.
The research population in this study comprised all interned OMIOs, aged 60 years or older, who are supervised by the Commission of Social Defense (CSD) in Ghent (n = 42), one of the four Commissions in Flanders with responsibility for the execution of the internment decision (Vandevelde et al., 2011). OMIOs who were unable to participate because of severe problems such as acute psychotic symptoms were excluded on the advice of the Commission. This was the case for 19 OMIOs.
The remaining 23 eligible participants were contacted in different rounds in accordance with the protocol set forth in Figure 1. In the first round, 20 OMIOs and their lawyers were approached by means of an information letter in which the goals and the procedures for the study were clearly outlined. Unfortunately, one OMIO passed away by the time we contacted him, and another one was declared free from his measure of internment, which reduced our sample size to 21 possible participants. In this first round, 10 OMIOs agreed to participate in the study. However, 2 of them were subsequently omitted from the study, one because of agitation at the time of the interview and another because he did not show up at the appointment twice, and chose not to participate. In an effort to increase the number of participants, another 10 OMIOs were invited to participate. However, from the extended sampling frame provided by the Commission on Social Defense, only one

more OMIO agreed to participate, but this participant could not be included due to the poor mental state at the time of contact. As a consequence, the number of participants remained at 8, 7 of whom were male. Although the sample ($n = 8$) is obviously small, it still falls within the recommended range for phenomenological research, that is—according to the source—estimated to be between 5 and 25 (Mason, 2010).

Figure 1. ***Flowchart of participants selection protocol.***



Note. CSD = Commission of Social Defense.

The age of participants ranged from 61 to 72 years old ($M = 65.0$ and $SD = 3.8$). Participation was exclusively based on a voluntary basis without any financial inducements or payment in kind and all participants signed an informed consent document.

Procedure and instruments

From September 2011 until March 2012, one-to-one interviews were conducted either at the participant's house, a care setting, or in a penitentiary setting. The first two authors of this manuscript, experienced in working with psychiatric patients and/or persons with intellectual disabilities carried out the interviews. They used an interview schedule and process that was set up according to the principles of Baarda, De Goede, and Van der Meer-Middelburg (2007) whereby a topic list was used, which could be adapted in a flexible way depending on the course of the interview. The questions elicited information on:

- chronological and systematic reconstruction of the entire trajectory since the first incarceration
- living conditions in each place of residence,
- nature of mental health care and/or other support in each location,
- exclusion criteria for a desired place of stay during the trajectory,

- experiences concerning the treatment in the current place of stay and propositions for improvement.

The average duration of the interviews was 70 min, with a range from 39 to 128 min.

5.3.3 Data analysis

Interviews were transcribed verbatim. For the processing and analysis of the interviews, the eight-step guidelines outlined by Zhang (Zhang & Wildemuth, 2009) were followed and the software package Nvivo 9 was used. This contributes to the efficiency, repeatability and transparency of qualitative data by helping researchers to organize, manage, and code qualitative data (Hoover & Koerber, 2011; Mortelmans, 2011; Zhang & Wildemuth, 2009). Initially, the research questions provided the basis for the main categories: (a) descriptions of the care or containment trajectory, (b) experiences of the care or containment trajectory, (c) perceived exclusion criteria of care, and (d) suggestions for improvement. Next, the transcripts were read holistically several times and in doing so, other categories were constructed. The first two authors divided them further in subcategories until a tree structure containing different types of categories was achieved. During analysis, passages that were irrelevant to the research questions were subsequently excluded. This occurred in 7.13% of the total interview time. Text fragments, regardless of size, were assigned to one or more categories (coding). During the coding process itself, the tree structure was further refined whereby every new category that emerged from the data was systematically added, either as a new main category, or as a subcategory. This cycle of categorization was repeated several times, until coherence between the categories was reached. This resulted in an adapted tree structure and a clearly defined coding procedure. Inter-rater reliability was assessed by means of calculating the Cohen's kappa score on 130 randomly selected text fragments, which were coded separately by two of the authors and compared afterward. Finally, after three rounds of coding and adapting the tree structure, a Cohen's kappa score of 0.72 and a degree of agreement of 97.25% was reached, which can be considered as substantial agreement (Thompson, McCaughan, Cullum, Sheldon, & Raynor, 2004).
The software package Nvivo 9 enables the use of counts and percentages of the coded text fragments, which may give an idea of the number of statements per category and subcategory. Although this certainly has its value with regard to the description of the sample, this study is focused more on the complex and personal narratives of the participants. The latter is more grounded in a postmodern (inter-) subjective approach in qualitative research, which aims at disclosing individual life stories (Broekaert, Van Hove, Bayliss, & D'oosterlinck, 2004; Van Hove et al., 2012).

5.4 Results

What Does the Care Trajectory of the Participants Look Like?
At the time of the interview, three participants were residing in a penitentiary setting, one in a residential care setting (i.e., a home for people with noncongenital brain

injuries) and four others were living at home.

According to the number of transitions between care, (attempts to) independent living at home and detention, participants can be categorized into two groups: (a) those ($n = 4$) who went through a long trajectory with multiple transitions (minimum = 9, maximum = 20) and (b) those who were only recently placed under the measure of internment at older age or who had experienced only a limited number of transitions (<3; cf. Table 1). In the first group, OMIOs had been in and out of the criminal justice system for many years, most of them since their twenties. Mostly their lives are characterized by periods of being detained, being interned, being treated in psychiatric services, and living independently, and as such being free (on probation). This cycle has been repeated several times during their lives. They can be described as "chronic internees". The second group consists of people who have only recently been interned. Some of them had also been in prison once when they were young, but they had not been interned yet. Two of them were living in prison, waiting for an appropriate treatment. Two others lived at home, one of them receiving psychiatric daycare, and the other one receiving psychiatric follow-up, in the form of a monthly consultation.

Table 1. Overview detention and care trajectories

Name	Age	Gender	Legal charges	Current residence	Current activities and treatment	Number of transitions
C.	61	M	Refused to follow treatment and got in a fight with police officers	Institution intellectual disabilities	Day activities in the institution + Psychiatric follow-up	±10[b]
M.	68	M	Murder, robbery	Penitentiary setting X	None	±14[b]
B.	63	M	Knife fight	Penitentiary setting X	None	2
N.	67	M	Unknown	Penitentiary setting Y	None	2
D.	62	M	Unknown	Home	Daycare in psychiatric center + psychiatric follow-up	3
J.	62	M	Stealing	Home	Volunteering, medication + psychiatric follow-up	20
H.	65	F	Vandalism, robbery	Home	Daycare in psychiatric center, medication + psychiatric follow-up	9
A.	72	M	Unknown, fight with neighbors was the motive for internment	Home	Psychiatric follow-up	3

a The "legal charges" column is based on the narratives of the participants, not on their official files.

b Due to complexity of the trajectory the number of transitions may be inaccurate. The figure shown is a minimal estimation.

5.4.1 How did the participants experience their care trajectory?

Experiences in each of the settings (institutional care, penitentiary setting, home) were coded as either "positive experience" or "negative experience". As such the proportion of positive experiences versus the negative ones in each residential category was derived. Figure 2 shows how OMIOs experienced their stay in different settings. The specific issues that were perceived as either positive or negative in every setting will be further elaborated, using literally transcribed quotes from the interviews.

Figure 2. Proportion of positive versus negative experiences in the different places of stay.

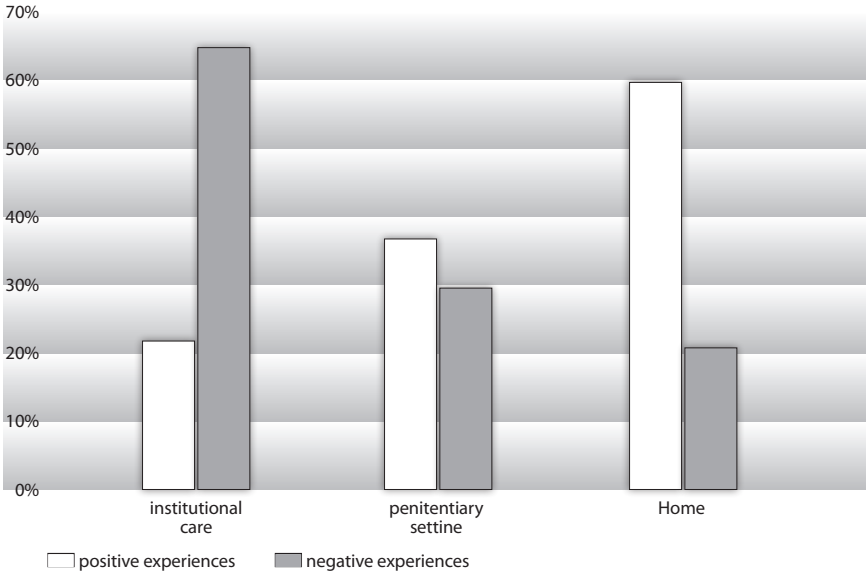


Figure 2 presents the proportion of positive versus negative experiences in every place of residence. Regarding institutional care, 30 experiences were shared, 6 of which were positive and 19 were negative. Within penitentiary settings, OMIOs shared 100 experiences, of which 35 were positive and 28 were negative. Finally, 42 experiences were shared about "home" as a place of residence, of which 24 were positive and 8 were negative. As illustrated in Figure 2, the greatest proportion of positive experiences was reported in "home." Contrary to what was expected, institutional care settings elicited the highest proportion of negative responses, which is especially striking if compared with the lower proportion of negative experiences and the higher proportion of positive experiences in a penitentiary setting.

Institutional care. The term institutional care comprises all settings in which OMIOs are treated on a residential basis other than prison settings—but not in normal domestic settings, for example, a psychiatric hospital, a nursing home, a residential unit for

persons with an intellectual disability, and so on.
Six of the participants had lived in one or more types of institutional care facilities before, whereby they disclosed negative experiences relating to the therapeutic and occupational activities. Two participants stated that there were not enough activities. They reported boredom, inactivity and they did not experience their stay as being therapeutic.

> *I have lived here on a residential basis. There was too much spare time and too little therapy. That is not good either. After a while you start thinking: what do I have to do there? You can read the newspaper at home as well, for that you do not need to be here. Or you sleep the whole day. (D., 62 years old, home)*

Three participants reported sufficient types of therapy, but they did not experience this as being useful and in some cases it was even perceived as being childish.

> *In the psychiatric center, there was therapy, but I don't like any kind of therapy. It is as if they are dealing with little children, making drawings and paintings. The only thing I did like was the sports activity on Thursday, that was fun, but apart from that I did not like it very much. It was too much creative stuff.*
> *(H., 65 years old, home)*

Other negative experiences concerning institutional treatment settings had to do with the lack of psychological and psychiatric support available. One respondent experienced little help from the psychiatrist in the mental health hospital where he resided.

> *Interviewer: Did you have conversations with the staff or with psychiatrists?*
> *A.: From time to time, but psychiatrists, no! Sometimes he invited me in his office, but these people pretend to have no time at all to talk to you. They do not even spend five minutes on your treatment. (A., 72 years old, home)*

Two participants complained that their compulsory medical treatment was inappropriate for their needs.

> *You know what it is like in a psychiatric hospital? They overload you with all these medications, while actually all they have to do is listening to you. It is not because you are dealing with a problem, that you have to take medication. (H., 65 years old, home)*

Only one OMIO mentioned positive experiences about institutional care facilities, referring particularly to his stay in the institution where he was living at the time of the interview.

Penitentiary setting. Three participants were living in a penitentiary setting at the time of the interview. Two of them had also lived in other penitentiary settings previously. Four

other participants were currently living at home or in a residential treatment setting but had also one or more experiences in penitentiary settings. Only one participant had never been in a penitentiary setting.
Unexpectedly and contrary to the experiences in residential treatment settings, OMIOs expressed more positive than negative experiences about their stay in prison. It is noteworthy that positive experiences concerned not only the activities, but also the available psychological and social support.

The care team was really good. In January it will be a year since we have a care team. That is meant for the mentally ill offenders. It is a doctor, a good person, I cannot say a single bad thing about him, it is a doctor who prescribes special medication, a psychiatrist. Then there is also a psychologist, mine is a very good one. She comes to see me in my cell to chat and to laugh from time to time. The care team is very close to the people. They enter your room, they sit down on your bed or a chair and they talk to you. That is fantastic. (M., 68 years old, penitentiary setting)

Four participants were positive about the activities that were offered in prison. They appreciated the opportunity to take a variety of classes, but also to participate in leisure and sports activities.

There were a lot of activities and you could take classes, for example computer classes. I have two certificates, one for MS Word and one for "computer initiation." [. . .] You can follow business management or secondary education for adults. That is interesting, actually."
(B., 62 years old, penitentiary setting)

Being able to work in prison was highly valued by the participants. Several reasons emerged, ranging from "having an occupation" to "earning money" and "enhancing one's self-esteem." The sense of being valued or deriving value from work is also seen as a positive experience.

I also worked in prison, every morning. I did little jobs, screwing bolts and stuff like that. But you earned some money with it. I had about 50 or 60 euros a month. [. . .] I saved it for my grandchildren. (C., 61 years old, residential treatment setting)

Where I work now, we have a very good chief. It is the very first time in prison that a chief said to me, "friend," and he gives me a little pat on the shoulder then, "you did very good today." That moves me. If you have been in prison for so long, and you receive these words from a chief, that does something to you.
(M., 68 years old, penitentiary setting)

Two participants were positive about the psychosocial services in one of the penitentiary settings.

The psycho-social services, that was supporting. That was good. They arrange practical things for you, like the paperwork with health services and so on, the things you do not know or you cannot do yourself. They had lots of contact with my wife as well.
(C., 61 years old, residential treatment setting)

Negative experiences in a penitentiary setting mainly concerned the practical support that was offered in prison by the psychosocial service and the stay in a penitentiary setting in general.

The people of the psycho-social service, I hate them. Always being rejected, making unjust reports for the Commission, and having to stay in prison, just because of them. (M., 68 years old, penitentiary setting)

Other negative experiences were related to the activities available in prison. One person experienced this as a way of being occupied, but he did not think of this as helpful. This person experienced the psychological support and treatment for mentally ill offenders in prison as being of a poor quality. Another participant confirmed this opinion.

Interviewer: In that first period you were arrested, what kind of things were done? Did you have support there?
J.: No, from time to time you have to go to the social service or to a psychologist. But that is just child's play. You are in prison, others too, and you really don't have any help there. You just sit there like a detained person. You are there between the detained ones. People talk about a psychiatric ward in prison. I have been there for several times now, and I can tell you: it does not exist.
(J., 62 years old, penitentiary setting)

According to one participant, the period in prison was a very depressing one, even to the extent that the participant considered suicide. It is striking that this quote stems from the only female participant in our study. It seems that she experienced her time in prison much worse than did her male counterparts. Unfortunately, due to the small sample size, and the fact that she was the only female participant it is impossible to draw firm conclusions from this observation.

I did no longer want to eat in prison. I only wanted to die. I dreamed about being dead. I didn't see any way out. They can intern me as many times as they want, but I do not ever want to go back to prison. (H., 65 years old, penitentiary setting)

Home. Four participants were currently living in their own house. Two participants were obliged to visit a day clinic of a psychiatric center every weekday. One of them carried out semi-industrial work in a sheltered workplace, one person volunteered in a secondhand shop, and one person just lived at home without any special activities. All

of them were followed-up on a domiciliary care basis by a psychiatrist. Most of them saw their homes as the best place to stay. One person stated that he needed more support to restrain his alcohol abuse. The need to be under control was also stated by three other persons.

> *I lived alone in an apartment for a while, a nice one. But then, of course I bought some bottles at the groceries and I was back on the wagon. Damn it.*
> *(C., 61 years old, residential treatment setting)*

Most participants were positive about the activities offered in the community-based care. OMIOs emphasized the importance of having sufficient activities, and doing something useful. However, even for those at home, creative therapies and some other forms of activities were also experienced as being too childish by three of the participants. Sports and cooking activities were positively valued, as were psycho-educational initiatives.

> *We are in groups of about eight or nine persons and then we have therapy together. We discuss the influence of using alcohol and the influence of smoking. We talk about being healthy. Last Tuesday we had a class about healthy food and burning fat. It is interesting to hear, some things I did not know yet. (D., 62 years old, home)*

When participants had too much spare time in the psychiatric center, they reported boredom, which in turn effected their motivation to continue the treatment.
Three of the four persons living at home had an unpaid job. Having a job increased the overall feeling of well-being for the OMIO. They liked doing their work, being able to fill their days in a useful way and taking satisfaction from it.

I have to work. It is volunteering, I have to do that. It is part of my conditions to be free. I love doing it. I like being there. I stay there until my retirement and if necessary I will stay even longer, until I can't do it anymore. So I have found the job for me. (J., 63 years old, home)

All OMIOs residing at home also appreciated the domiciliary follow-up by their psychiatrist. They experienced the consultations as an important source of support.

Experiences concerning choice and participation/"having a voice." Participants frequently referred to the ability to make personal choices. Most of the statements reflected negative experiences. In two cases they referred to the time in which the decision for the measure of internment was taken. Two of them declared that their view on the matter had been fully ignored and both complained about a perceived laxity on the part of their lawyer as well. Another part of the negative experiences concerned the conditions in which participants had been given probation. Participants mentioned

that they had to accept probation conditions under duress, because for them it was the only opportunity to achieve more freedom. In addition, the purpose of some of the probation conditions appeared to be unclear for them and participants often felt they had been insufficiently informed about the consequences of violation of any of these conditions. The impact of deficient information also arose when participants had been transferred from one place of residence to another.

> *Interviewer: Did you have any say in the decision to come here?*
> *H.: Oh no, in prison Y the commission of social defence stated that there was a great lack of available places in prison Y and therefore they decided to bring me here (prison X). (B., 62 years old, penitentiary setting)*

Age-related experiences. Surprisingly, only three participants, all of them residing in prison, shared experiences related to their aging process. One of them explained that he could not engage in the same work activity anymore and recently felt obliged to find less demanding activities. Likewise, he could not participate in sports any longer. However, the participants did not consider these age-related limitations as a serious problem, as they found possibilities in prison to cope with this. For example, one of them does not join sports activities anymore, but instead, he now enjoys watching sport and cheering for the other inmates. Nevertheless, one participant referred to more important consequences in a penitentiary setting as a result of physical deterioration because of age.

> *N.: Compared to the younger fellows we need more time to change clothes, but we only get five minutes to shower. I can't do this on time. You should try it yourself: undressing, showering, drying and getting dressed within five minutes. This is really impossible.*
> *Interviewer: Do they not take account of this?*
> *N: No, if we shower too long, then we receive a written reprimand and thereupon we have to go to the director. (N., 65 years old, penitentiary setting)*

Two OMIOs, living in prison, felt that they were stuck in the penitentiary setting, because of their age. They were waiting to be moved to a mental health institute, but according to them, no appropriate place could be found for them due to their old age. One of them has grown old in prison, having been incarcerated for about 25 years. The other one was in prison for 5 years.
One OMIO, who had lived in a psychiatric hospital before, does not feel old herself, but mentions that the activities that are offered there are not appropriate for the elderly.

Experiences related to the measure of internment. Participants also gave their opinions about being the subject of measures of internment. Five participants were convinced that the imposition of such measures had been unfair and that a correctional punishment would have been better for them. Conversely, two other respondents were

more positive and perceived the measure as a kind of self-protection to prevent further harm. They had even spontaneously requested extensions of the measure.

5.4.2 Have the participants been confronted with exclusion criteria at any stage in their care trajectory?

Three participants never experienced problems in finding an appropriate treatment, but the other five did, with the following reasons for refusal given: (a) bad reputation because of transgressing the house rules, for example, using drugs or alcohol; (b) administrative difficulties hindering placements; (c) lack of places in residential care settings; and (d) inadequate updates in reports on their current situation.

> *In prison there is a rapid turnover of staff such as social workers, psychologists and psychiatrists. Well then, you end up with somebody who doesn't know your situation at all. Despite them not knowing you at all, they write a report for the Commission anyway. On what information is their report based? What do you think? On the information of previous reports of course! This keeps on going that way, again and again . . . That's unfair! This is a serious shortcoming and a big mistake. (M., 68 years old, penitentiary setting)*

Old age was experienced as an exclusion criterion from appropriate treatment by two of the participants residing in a penitentiary setting.

> *Did you know that I wrote at least a thousand letters? When I turned 60, I tried getting in to an old people's house, one tries anything to get away. But at the moment I am totally stuck. (M., 68 years old, penitentiary setting)*

5.4.3 How do the participants see their future and which elements could improve their situation?

Three participants in prison felt hopeless about the possibility of ever being transferred to a non-prison care facility or at home in the future. However, participants living at home had more positive expectations. They are relatively happy with their situation at present and expect to be released from all conditions in the future.

Two participants felt that people in their situation should receive more help and more treatment. It was reiterated that older people's therapies should be more age appropriate. Contrary to the current situation where psychopharmacological treatments were the primary type of intervention, participants expressed a strong preference for more psychosocial interventions, which focused on human interaction, communication, and psychological support.

> *A mentally ill offender should not be locked up. They should be in a psychiatric ward. In prison Y, they do not have a psychiatric ward. There is one in prison X, but they don't do a lot over there. It always comes down to the fact these people should receive more help. As a mentally*

ill offender you are not punished, but even though they say you are not punished, they put you behind bars. I just don't get that. That must be changed.
(J., 63 years old, home)

5.5 Discussion

In general, the results of the study reveal that OMIOs mentioned more positive and less negative experiences in penitentiary settings when compared with institutional care settings. Independent living is the most favored option for care. This may be due to the fact that the latter option enables offenders to participate in activities (e.g., a volunteer or paid job) that foster personal competence and feelings of being useful to others. Living at home also contributes to making personal choices. Furthermore, being able to freely mingle with other people in society has a positive effect on communication and contact with the "outside" world. Unsurprisingly many participants reported that the negative experiences of boredom, having negative feelings, such as depression and hopelessness, non–age appropriate activities, poor psychosocial support, and not being adequately informed are common across settings. These findings constitute an important challenge as how to organize the care for and support of OMIOs. In the following section, the most striking results will be situated in the available international literature and overarching suggestions for future research will be presented.

5.5.1 The course of the trajectory

In the past, four participants went through a remarkably long trajectory characterized by many transitions between care, detention and freedom, and different care settings. In addition, four others only had a limited number of transitions. This is consistent with the existing categorization of criminal pathways of older offenders, which have been categorized as falling into three broad groups, namely (a) "long-term inmates who grow old in prison due to long sentences"; (b) "repeat offenders who return to prison at later age"; and (c) "first time offenders," who offend in later life (Aday, 2003; Grant, 1999). However, during the interviews no information about the nature of offences was explored. It was a deliberate choice to focus on current and past experiences of the care trajectories, because it was assumed that avoidance of discussion of the crime history would instill a climate of confidence with the participants.
With regard to the current place of stay, aging was not especially perceived as a hindering factor in the lives of OMIOs. In general, classic age-related problems were hardly mentioned and none of the participants in the study asked for age-related facilities. Yorston and Taylor (2006, p. 336) previously warned against accommodating older offenders exclusively on the grounds of chronological age, arguing that "[s]ome of them like the hustle and bustle and feel they enjoy a high status in mixed-age units". Also Sterns (as cited in G. M. Johnson, 2008, p. 4) and Gallagher (2001) confirmed that there is no "set age" at which older offenders should be segregated into geriatric services.

Often "early aging" is used to justify the use of age cutoffs of 50 years or sometimes even lower (Aday, 2003; Price, 2006; Williams & Abraldes, 2007). However, in this study no evidence was found for such accelerated physical and mental deterioration. This has been questioned by other researchers; for instance, Gallagher (2001) stated that "no empirical data could be found to support this assertion". In addition, Oei and Bleeker (2003) mentioned that life expectancy among offenders is raising rapidly. The same authors report that the manifestation of incapacitating health problems is not a linear process, which in practice becomes only noticeable in the last stage of life. In this respect, even the oldest participant in our sample (72 years) was still relatively far away from this stage. Nevertheless, age was perceived twice as a hindering factor to be transferred out of prison; however, it may be assumed that in both cases other complicating factors such as a high risk profile must be taken into consideration.

5.5.2 Prison, institutions or independent living?

According to the participants in our study, living in a normal domiciliary home was perceived as the most desirable option and was appreciated especially if independent living was combined with outpatient care and appropriate leisure activities. The continuity of care for mentally ill offenders can only be improved if their needs are well identified prior to release, and by assisting them to engage effectively with the necessary agencies in the community (Jarrett et al., 2012). While Feitsma, Popping and Jansen (2012) found a "non-attendance" rate of 24.9% for appointments of forensic outpatients with caregivers, it must be noted that the same authors indicate that non-attendance among forensic outpatients is mainly associated with younger clients, and as the forensic outpatients are getting older their compliance is increasing.

Negative experiences in institutional care reported by the OMIOs in this study could be classified into three categories, namely (a) boredom and feelings of uselessness, (b) age inappropriate therapies, and (c) poor quality of psychological support offered in mental health care.

Eastwood, Frischen, Fenske, and Smilek (2012, p. 482) argued that boredom can be a "chronic and pervasive stressor with significant psychosocial consequences". Likewise, Newell, Harries, and Ayers (2012) identified boredom as a complicating factor in psychiatric rehabilitation. Brunt and Rask (2005) showed that patients in a maximum-security forensic psychiatric hospital felt uninvolved in the life of the ward and consequently tended to invest no extra effort to improve their situation. Interestingly, according to the participants in our sample, complaints about activities in prison seemed much less than in other settings. Imprisoned participants appreciated possibilities to engage in paid work that raised their self-esteem. Not only did the salary provide the autonomy to buy things, also the interpersonal contact during the working hours prevented boredom and loneliness. Moreover, participants appreciated the support from the staff in the special care teams in prison, whereas in psychiatric wards they complained about the lack of personal attention and the perception of an excessive

emphasis on psychopharmacological interventions. This corresponds to findings from Björkman, Hansson, Svensson, and Berglund (1995) who found that patients most valued the empathic qualities of staff such as: taking care, understanding, respect, devoting time to patients, and the ability to create a safe treatment environment. Least value was ascribed to characteristics of the physical environment and daily routines on the ward. Similar findings are reported by Johansson and Eklund (2003) who found that inpatients and outpatients perceived the quality of the helping relationship as the most important factor for good care. Remarkably, in the same study, some inpatients considered their admission as a "relief of pressure" and declared that an undemanding and structured environment helped them to escape from the high expectations and stress in the normal society. This may offer an explanation for the fact that several OMIOs in our study appreciated their stay in prison as being characterized by a low demanding, well-structured and a predictable environment. However, in this respect some OMIOs expressed a striking ambivalence between complaints about boredom on the one side and simultaneously a wish for a low demanding milieu on the others. However, this type of ambivalence has previously been described among psychiatric inpatients by Johansson and Eklund (2003).

5.6 Limitations

The study draws on a small sample of eight participants. From a phenomenological perspective, a minimum number of participants is neither defined nor required, although a minimum of six participants is mentioned in the literature as already described in the introduction of this paper (Mason, 2010). Besides, recruitment numbers may vary significantly according to the purpose and approach of the investigation such as an ideographic versus a more general description of phenomena (Finlay, 2009). This study, based on eight ideographic narratives, aimed at describing how OMIOs perceive their care and detention trajectories. It was not the aim to be conclusive, but rather to identify topics and themes for future research, as revealed through the analysis of the narratives of the offenders themselves.

Moreover, drop-out and selection bias are difficult to avoid and are well-known problems in forensic qualitative research. Peternelj-Taylor (2005, p. 354) described these obstacles in nursing research as follows: "[g]aining access to the offender, recruitment and retention, establishing trust, and issues related to the culture of the research environment are among the many issues facing nurse researchers embarking upon a program of research with offenders". In addition, the same author states that selection bias must be taken into consideration as a general shortcoming in research with vulnerable forensic populations. In particular in this study, it can be assumed that the most frail and vulnerable OMIOs could not be reached for participation. However, due to privacy rules, underlying causes of drop-out could not be investigated.

As the main purpose of this study aimed at an analysis of personal experiences in the entire care trajectory of participants, the results also reflect experiences from the time

that the OMIOs were younger than the defined threshold of 60 years. As such, most of the results must be interpreted as experiences from the past and consequently they cannot always be considered as contemporary age-related experiences. In fact, age-related issues brought up spontaneously by the participants were relatively uncommon. Possibly, the participating OMIOs did not perceive themselves as "old." In this respect, Kleinspehn-Ammerlahn, Kotter-Grhün, and Smith (2008) found that elderly in the general population (non-forensic) felt younger than actually was the case chronologically. On average, a discrepancy of nearly 13 years was estimated.

5.7 Future research

Due to the exploratory nature of this study, further research on OMIOs is definitely needed. An important objective is to further identify and elaborate the elements that need to be tackled in the current delivery of treatment and support, to better meet the specific needs of OMIOs. As revealed through the offenders' narratives, the importance of fulfilling (therapeutic) relationships, being appropriately informed so that personal choices can be made, being able to avail of age-appropriate activities and the possibility of feeling useful and being able to engage in meaningful activities (such as a job) as revealed through the offenders' narratives, regardless of the place of residence are areas of potential future research focus. Therefore, it would be interesting to undertake a comparative analysis of the experiences of OMIOs being treated within a classic rehabilitation model, with emphasis on security, as compared with the experiences of OMIOs being treated within a more positive and strengths-based approach, such as the GLM model.

Likewise, more research into the implications of community-based care, combined with meaningful activities and the support of a social network, could deliver important insights to inform future professional practice and enhance the experience of care. This responds to the need of a "normal"—in the GLM this would be referred to as a "good"—life and regular living circumstances that most OMIOs seem to be seeking. The development of more formal liaison arrangements between forensic care and elderly care could be beneficial in this respect (Curtice et al., 2003; Tomar, 2005; Yorston & Taylor, 2009) and underscores the necessity of more research focused on intersectional cooperation. Furthermore, research activities to detect and assess the presence of additional vulnerability because of age-related deterioration seems important (Abdul-Hamid, Johnson, Thornicroft, Holloway, & Stansfeld, 2009), as age was mentioned by some participants as an impeding factor for entry into treatment services. Furthermore, it would be interesting to investigate whether there are important differences in the way care trajectories are experienced by male OMIOs and by female OMIOs. Currently, little is known about this subject, and as a consequence, no or only limited distinction is being made in the way both genders are treated.

Last but not least, the finding that feeling useful, having possibilities to interact, and being in charge of personal choices are important conditions in the life of OMIOs may—in our opinion—be regarded as the most important conclusion of the present study.

This resembles the concepts of competence, autonomy/mastery, and relatedness that were consistently found by Deci and Ryan in their seminal work on human needs and the self-determination theory (see, for example, Deci, 2008). More research into how these concepts could be targeted in supporting OMIOs offers promising possibilities for future research and may lead to combining risk assessment with improving well-being to stimulate offender rehabilitation, even in later life.

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Chapter 6

General discussion

Abstract

In this last chapter, the main findings of the dissertation are summarized and discussed in relation to the theoretical models described in chapter 1. Implications of the study are addressed with special focus on the needs of older offenders, in line with the assumptions of the Good Lives Model. The discussion concludes with limitations of the study and suggestions for future research.

6.1 Introduction

The available studies on the situation of older offenders appeared to primarily focus on age-related health-related and criminological aspects. In line with the strengths-based assumptions of the Good Lives Model, the present dissertation intended to supplement this rather exclusive risk- and deficit-oriented approach (Barnao & Ward, 2015). The first objective of this dissertation was to explore the characteristics of the older offender population in Flanders (both older forensic psychiatric patients and older convicted prisoners aged 60 years and over) with respect to the essential life domains as operationalized in the WHO Quality of Life-definition (Skevington et al., 2004). (RQ1). The second aim was to examine which factors, linked to human needs ("primary goods") as discerned in the Good Lives Model (Ward et al., 2013) are related to the four Quality of Life domains of older prisoners: physical domain, psychological domain, social domain and the environmental domain (RQ2). The third objective was to get insight in the trajectories that older forensic psychiatric patients had passed through in the course of life. From the patients' personal experiences, we aimed to identify both impeding factors and beneficial elements in relation to their successive living contexts (RQ3).

6.2 Discussion of main findings in relation to the research questions

6.2.1 What are the characteristics of older offenders in Flanders (RQ1)

In 2014, at the start of the study, 272 incarcerated offenders were found to be aged 60 years or older (chapter 1 & 4). In 2016, this number decreased to 233 which corresponds with 4.4% of the prison population (n=5266) in Flanders. The forensic psychiatric population (situation in 2011[1]) consisted of 174 people aged 60 years and older, which corresponds with 8.9% of the total number of forensic psychiatric patients (n=1962) (chapter 1 & 2).

Persons aged 60 years and over constitute 28,9% of the population in Flanders[2], which is approximately seven times higher as compared to the imprisoned group and three times higher as compared to forensic psychiatric patients.

In Flanders, people aged 70 years and over accounted for more than half (50.4%) of those aged 60 years; nearly one fifth (18.1%) was aged 80 years and over (Statbel, 2016). In prison settings, this was 13.8% (n=27) for those aged 70 years and over, and 1.5% (n=3) for those aged 80 years and over.

In the following sections, the focus will be on the results with regard to Quality of Life of older offenders as this – in line with the GLM – supplements the available (often risk-

1 More recent figures are unavailable as there is currently no centralized database of forensic psychiatric patients.

2 These figures concern the male population, aged 18 years and over in the Flemish community in 2014 (Statbel, 2016).

and/or psychopathology-oriented) knowledge base on older offenders.

Characteristics related to the physical Quality of Life of older offenders

Both in chapter 2 (based on the retrospective case note study) and chapter 4 (based on the interviews using self-report) physical problems among older prisoners were highly prevalent. At the time of investigation, eight out of ten older prisoners reported to be medically treated. Cardiovascular, respiratory problems and musculoskeletal were mentioned most frequently, which corresponds with recent international findings in older offending populations (e.g. Davoren et al., 2015; Kingston, Le Mesurier, Yorston, Wardle, & Heath, 2011; Omolade, 2014).

Some health issues (i.c. respiratory problems and pain) were reported to be less treated compared to the extent of complaints by the participants (chapter 4). This might indicate that the principles3 of equality in level of and access to healthcare provision in prison and society are challenged (Dheedene, 2011). Problems with quality standards of correctional care provision are observed in many European prisons (Møller et al., 2007). Specifically with regard to the Belgian situation, the vulnerability of imprisoned forensic psychiatric patients could be stressed (Vander Laenen, 2015).

In the present study (chapter 4), no significant differences in subjectively perceived physical QoL between older convicted offenders and older forensic psychiatric patients were found (chapter 4). Furthermore, the physical QoL of older prisoners did not differ significantly from their older peers in society. It could be assumed that even though the quality of health care is mostly more basic in prisons than in the community, for some socially disadvantaged people it may be beneficial to reside in prison as they often were excluded from health care before their incarceration (Department of Corrective Services, Government of Western Australia, 2016). Previous research has indicated that 40% of the older offenders perceived a decline in physical wellbeing after incarceration, whereas more than a quarter perceived an improvement (Loeb, Steffensmeier, & Myco, 2007). Based on the findings in this dissertation, 37.5% of the older prisoners reported a positive association between their health situation and the accessibility of prison healthcare services.

Although smoking is known to cause lethal diseases such as cancers, respiratory problems and cardiovascular diseases, 50% of the older prisoners in Flanders were smoking daily (chapter 4). In addition, in older adults, smoking has been associated with poor bone health (osteoporosis) especially in accumulation with other risk factors that may be present in prison contexts e.g. low diet quality and lack of physical activity (Cottyn & De Buck, 2011; Zhang et al., 2016) (chapter 4).

Lifetime prevalence of alcohol abuse was mentioned in up to 50% of the older offenders' life course (chapter 2, 4, and 5). Case note files of older forensic psychiatric patients (chapter 2) referred to the destructive effects of alcohol on brain functioning. Even in the absence of current alcohol abuse, lifetime prevalence of alcohol abuse was associated with lasting negative consequences on neurocognitive functioning in later life (Woods

3 Basic Law on the Belgian prison system and the legal status of detainees (12th January, 2015).

et al., 2016). In chapter 5, older forensic patients indicated that alcohol abuse had in many cases been the reason for refusal of admission and early discharge from health care facilities. In the literature, alcohol abuse by mentally ill offenders on probation, was associated with higher rates of recidivism and more violent offences (Baillargeon et al., 2009; Castillo & Alarid, 2011).

Characteristics related to the psychological Quality of Life of older offenders

Thirty percent of the older prisoners reported to have been the victim of psychological abuse during childhood. More than a quarter reported physical and almost a quarter sexual abuse. The subpopulation of older imprisoned forensic psychiatric patients had experienced twice as much physical abuse during childhood in comparison to their convicted peers (chapter 4). Similar high prevalence figures of adverse situations during childhood emerged from the case note study on older forensic psychiatric patients (chapter 2).

The assessment based on the Mini International Neuropsychiatric Interview (chapter 4) revealed that more than one quarter of the older prisoners were at risk for committing suicide (chapter 4).

It is remarkable that the global score for psychological Quality of Life of older male prisoners was not significantly lower compared to older peers outside in the community, certainly when considered in relation to the high prevalence of suicidal thoughts (26.1%), and depressive disorders (14% had a current depressive episode and 12.1 % had dysthymia, cf. chapter 4).

Further, according to the results of the MoCA screening, underperformance in cognitive functioning was identified in more than 50% of the older prisoners but no differences were found between convicted and forensic psychiatric prisoners (chapter 4). Based on the case note study, more than 20% of the older forensic psychiatric patients were reported to have an intellectual disability, with – again – no statistically significant differences between imprisoned and non-imprisoned populations (chapter 2).

Age-related cognitive decline can possibly be one of the reasons for the high prevalence of cognitive dysfunction among older prisoners. Yet, dementia was only mentioned in 4.4% of the older forensic psychiatric patients (none of whom residing in prison) (chapter 2). It should be noticed, however, that underdiagnosis is a generally recognized issue in prison settings (Maschi, Kwak, Ko, & Morrissey, 2012).

Other factors that might explain the high prevalence of cognitive dysfunctions include historical factors. If applicable, prevalence rates found in this dissertation are reported in brackets with reference to the corresponding chapters: Brain damage due to substance abuse (12.1%, cf. chapter 2); non-congenital brain damage caused by fights, accidents or brain strokes (Gardner & Zafonte, 2016) (11.0% for brain injuries in general, cf. chapter 2); side effects of psychotropic medication among elderly (31.8% reported that psychotropic medication was prescribed, cf. chapter 4) (Shinohara & Yamada, 2016), and the impact of the low demanding prison environment (Meijers, Harte, Jonker, & Meynen, 2015).

Characteristics related to the environmental Quality of life of older offenders

The subjective Quality of Life of older offenders in the environmental domain was found to be significantly lower as compared to the reported QoL of older peers in the community (chapter 4). The implications of being admitted in a prison environment for the first time later in lifetime as well the interaction of aging with the adaptation process into the prison environment emerged as two essential issues.

First time offenders in the prison context

Nearly 50% of the older prisoners was incarcerated for the first time at the age of 45 years and over and one out of six was aged 60 years and over when first incarcerated (chapter 4). More than their peers with long term sentences and persons who had recidivated, older first time offenders are particularly vulnerable in prison environments because of their inexperience with the prison culture. Examples include the lack of a network with other prisoners and staff at arrival, the higher risk to be victimized by other prisoners and the fact that they are not used to the typical restrictions of the prison regime (Dobbs & Waid, 2004). Forrester & Slade (2014) pointed out that the risk of suicide is most prevalent in the period immediately after the prison entry. Internationally, other risk factors for suicide included the presence of mental disorders, alcohol abuse, being of white ethnic origin, convictions for violence against persons, and having suicidal ideations. Most of these aspects appeared to be highly prevalent in older offenders (chapter 2 and 4). Older first time offenders are at greater risk to experience difficulties in adaptation to the prison environment in case their role as a parent or grandparent is ended brusquely (Aday, 2003).

Aging and the ability to adapt in prison contexts

By age people seem to be become more experienced in the activation of emotional self-regulated strategies, which generally leads to increasing resilience for longer periods of stress and accumulated stress (Schilling & Diehl, 2015). Accordingly, older offenders might react to multiple stressors in a more adaptive way as compared to their younger peers. In this respect, Loeb and Steffensmeier (2011) indicated that older offenders appear capable to develop health-maintaining strategies in prison. These strategies include finding alternative resources to obtain goods and to receive additional support, being able to manage their diet and weight, and engaging in physical activities. Loeb & Steffensmeier (2011) further report that the pursuit for a good physical health is principally driven by self-preservation: being respected and being perceived as healthy and strong by fellow inmates is a coping strategy of older offenders against victimization. In this dissertation, one quarter of the older prisoners considered themselves as insufficiently able to gain respect from other prisoners (chapter 4).

Characteristics related to the social Quality of Life of older offenders

The subjective social Quality of Life of older prisoners was found to be significantly lower as compared to the reference group in society (chapter 4). Nearly 50% of the older

prison population met visitors from outside only a few times per year, one third of the older prison population never received visits, and one third of the older imprisoned offenders reported to be lonely (based on the results of the De Jong-Gierveld Loneliness Scale (chapter 4). Yet, one third appeared able to create social networks inside prison with other inmates and correctional officers. Deprivation of social contacts is reported to be more intrusive for new entrants whereas long-term prisoners are generally more disconnected with the life outside prison and tend to adapt more to the culture and social life of the prison society (Dobbs & Waid, 2004). Dhami, Ayton & Loewenstein (2007, p.13) stressed that the relation between length of stay and adaptation is dynamic, and that each individual shows different degrees and types of adaptation at different times or in different situations. In this respect it should be noticed that for older prisoners in particular, similar effects, as described in the Socioemotional Selectivity Theory (SST), may contribute to the creation of new networks in prison. According to SST, older people in society are confronted with experiences of loss in their broad social network, which they substitute with contact and emotional support from the more intimate network members that remain (Shaw, Krause, Liang, & Bennett, 2007). In line with the prisonization theory (chapter 1), imprisoned forensic psychiatric patients, prisoners with intellectual disabilities and prisoners in solitary confinement appear more vulnerable to become institutionalized, hence they experience more difficulties to adapt after release (Haney, 2002). In this regard, we already mentioned the high prevalence of mental illnesses and intellectual disabilities found in this dissertation (chapter 2 & 4). Other results indicate that one in five of the older prisoners felt anxious about their release, one in eight declared wanting to stay in prison voluntary until death and 13.6% of the older prisoners never left their cell. Concerning these issues the situation of incarcerated older forensic psychiatric patients appeared significantly worse as compared to their convicted peers (chapter 4).

6.2.2 Which factors are related to the Quality of Life of older imprisoned offenders (RQ2)?

In chapter 3, the relations between primary goods (human needs) (pertaining to the Good Lives Model) and Quality of Life, were investigated. These primary goods were conceptualized in three areas of fundamental needs relating to (1) 'self' (psychological needs) (2) 'body' (physiological needs), and (3) 'social' (social needs) (Ward, 2002) and their relation with subjective Quality of Life in the physical, psychological, social and the environmental domains was studied. In summary, the area of the 'self' related the most to the physical QoL and psychological QoL, to a lesser extent to environmental QoL and not to social QoL. The human needs related to the 'body' were related most to the environmental QoL and physical QoL, and to a lesser extent to the psychological QoL and social QoL. The area 'social' was related most to the psychological QoL, followed by the physical and psychological QoL. In the next section, we will briefly review the main results of chapter 3.

Suicide ideation is related to psychological QoL and physical QoL

The manifestation of psychiatric disorders was not related to any of the QoL-domains which contradicts previous findings in populations of psychiatrically ill and older adults e.g. (Folsom et al., 2009; Hickey et al., 2005; Masthoff et al., 2006; Picardi et al., 2006). However, in one study in a Belgian high security forensic hospital no association of DSM IV Axis I psychiatric diagnoses (e.g. psychosis, mood disorders, schizophrenia) with QoL was found either (Saloppé & Pham, 2007). The present dissertation revealed that suicidal ideation was strongly related to both psychological QoL and physical QoL. Daniel (2006) reported that although depression and suicide are often co-occurring phenomena, hopelessness and suicide have a stronger correlation in prison populations than depression and suicide. Also Ivanoff and Jang (1991) found that hopelessness and suicidal behavior remained significantly correlated even after controlling for social desirability in the answers.

Ability to acquire respect from other prisoners is related to psychological QoL

The fact that older prisoners perceived themselves to be able to acquire respect from other prisoners, was strongly related to psychological QoL. According to Alaphilippe (2008), self-esteem in older adults is linked to the quality of adaptation, well-being, life satisfaction and health. The same author states that self-esteem is not related to chronological age, but to the people's quality of social integration and adaptive capacities to cope with life events, including physical and cognitive decline.

Fear for victimization is related to environmental QoL

Although many older prisoners stayed inside their cells during most of the time (chapter 4), we found that the amount of time of isolation in the cell was not directly related to any of the QoL domains. However, the prison context may cause a number of adverse effects as for example fear to be victimized by other prisoners was found to be negatively related to the environmental QoL. When older offenders feel intimidated, self-preservation by isolation might be a way of coping in order to improve the subjective QoL (Ireland & Qualter, 2008) .

Need for more visits is related to social QoL

No associations between feelings of loneliness and Quality of Life were found although feelings of loneliness were highly prevalent among older prisoners (chapter 4). It should be taken into account, however, that among older adults being alone and experiencing loneliness do not necessarily mean the same thing (Holmén, Ericsson, & Winblad, 2000; Valtorta & Hanratty, 2012). This seems supported by the finding that older prisoners who longed for more visits experienced a lower degree of social QoL. Reversely, it may be hypothesized that among institutionalized older prisoners (cf. theory of prisonization, chapter 1) experiences of loneliness and disconnection from the outside world can fade out.

6.2.3 Which (care) trajectories older forensic psychiatric patients have passed through during lifetime (RQ3)?

The third aim of the dissertation was related to the trajectories that older forensic psychiatric patients had gone through starting from the first encounter in lifetime with the criminal justice system. The focus was placed on the perspectives of the respondents themselves, in relation to barriers and supportive experiences.
Living at home appeared to have strong positive association with appropriate day activities (chapter 5). Remarkably, some of the participants expressed more positive experiences about their stay in prison compared to periods of treatment in institutional mental health care facilities. Boredom and feelings of uselessness, inappropriate therapies and low quality of psychological support (e.g. being 'sedated' by psychopharmacological medication instead of 'being helped') were mentioned as possible reasons.

Self-determination

Paradoxically, forensic psychiatric patients sometimes reported higher autonomy in prisons as compared to residential mental health care facilities. The following reasons were mentioned by the participants: there are no obliged therapy sessions, instead there are paid prison jobs, smoking is allowed in the rooms, and voluntary education programs are available. The finding that "having enough activities in prison" was strongly related to a better Quality of Life in prisons underscores the importance of perceived autonomy and agency (chapter 3). The results suggest that older forensic psychiatric patients indicate to reach at least two personal primary goods i.c. "excellence in agency" and "excellence in work" (cf. Good Lives Model, chapter 1) more easily in a prison environment as compared to therapeutic environments. Accordingly, from the perspective of the older forensic psychiatric patients, treatment in (forensic) psychiatric institutional care may be seen as a temporarily environmental constraint in adapting to meet the need of self-determination (Barnao, Robertson, & Ward, 2010). The present study showed that older psychiatric patients may lack the necessary skills to adequately react to the therapeutically requirements in regular institutional care settings, even when demands may seem low from a professional perspective. The results (chapter 2) indicated that many of the older forensic psychiatric patients were cumulatively disadvantaged in many respects, such as socially, mentally, and because of being exposed to stigma, amongst others. This corresponds to the concept of the life-course theory of Cumulative Disadvantage (Sampson & Laub, 1997).
Older forensic psychiatric patients reported that they were frequently rejected in health care facilities because of their criminal history. If they were admitted, they often failed to respect rules (e.g. not drinking alcohol, being in time for activities,…) or to adapt to the (house) rules and norms in the facilities and broader society (chapter 5). In this respect, Walravens (2016) states that the process of recovery is often more difficult for forensic psychiatric clients than for people who are treated within the 'regular' mental healthcare

system. Recovery of forensic psychiatric patients can be supported by enhancing their personal sense of safety, by understanding the patient's sense of personal identity, by getting insight in how their social networks function and by supporting the transition between institutional and community support (Shepherd et al., 2016). Clarke and colleagues (2016) suggested that developing a sense of self and connectedness could help to improve the recovery of forensic psychiatric patients. Walravens (2016) further indicates that these patients are in need of additional support, preferably provided by ex-forensic psychiatric patients with lived experience (peer support). Being invited rather being forced to participate in activities that are meaningful to steadily build a good life in the community is mentioned as an important aspect.

6.2.4 Adverse effects on trajectories due to stigma & labeling

In the present study, imprisoned forensic psychiatric patients had committed twice as much violent sexual offences (81.1%) and more homicides (24.5%) and attempted homicides (22.6%) than their peers who lived under parole outside prison (chapter 2). Parole boards are reluctant to grant conditional release to inmates who are serving for offenses that are regarded as heinous crimes, unsurprisingly in this regard sex offenses are targeted at first. The stigma associated with sex offenses generally overrules all other arguments such as good behavior or therapy adherence, that are usually taken into account in parole decision making processes (Vîlcică, 2016). Subsequently many older offenders are particularly vulnerable inside prison because stigma linked to sex offences can lead to physical and verbal abuse, social exclusion, and victimization, which even can be embedded in prison structures as well as in the community after release (Ricciardelli & Moir, 2013). Imprisoned older forensic psychiatric patients that had significantly more references about aggressive behavior, arson, symptoms of psychopathic behavior and brain damage due to alcoholism compared to their counterparts that were taken care of outside prison (chapter 2). Interestingly, no significant differences in the prevalence of mental health problems were found.

6.2.5 Exclusion criteria and reduced chances on treatment

Older forensic psychiatric patients reported to have been frequently confronted with exclusion criteria in treatment facilities due to substance abuse (mainly alcohol) or disturbing attitudes and adverse behavior (chapter 5). It should be noticed that both substance abuse and anti-social attitudes are identified as risk factors (criminogenic needs) in the Risk Need Responsivity Model (Andrews & Bonta, 2010). Remarkably, both of these dynamic criminogenic needs appear to be commonly applied exclusion criteria in medium security forensic mental health facilities (Baetens, 2014) and psychiatric hospitals (OGGPA, 2016). Although the overrepresentation of people with serious mental illnesses in correctional settings is generally agreed on, less consensus exists about the causal factors (Prins, 2011). Already in the 1940's, Penrose's theory referred to the inverse

relationship between the reduction of mental institution beds (deinstitutionalization), and the increase of the mentally ill in prisons, the so-called 'transinstitutionalization' process (White & Whiteford, 2006; Salize, Schanda, & Dressing, 2008; Hartvig & Kjelsberg, 2009). Kalapos (2016) stated that in addition to the accumulation of the numbers of mentally ill persons in prisons also more involuntary admissions in psychiatric hospitals and more forensic treatment trajectories are observed.

6.3 Implications for policy and practice

The characteristics of the older offenders' population differ considerably in terms of criminal pathways, ageing processes and support needs, which underscore the heterogeneity of this group. Yet, the findings led to some general recommendations in regard to what may support the development of a good ("fulfilling and pro-social life" cf. Ward & Fortune, 2013)) life of older offenders. Some of these recommendations are age-related e.g. with regard to physical deterioration, while others are linked to (other) individual characteristics e.g. the criminal offence or mental health problem or to the environmental context e.g. victimization and disconnection from society in prison.

6.3.1 Implications with respect to support needs of older offenders (RQ1)

Screening on mental health and neurocognitive problems

The prevalence of psychiatric problems was high, particularly for suicidal ideation (chapter 1 and chapter 4). With respect to early detection of prisoners suffering from psychiatric disorders, the European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment emphasized the role of prison management with regard to the provision of appropriate health training for members of the custodial staff (Europe, 2011).

According to the MoCA screening (chapter 4), underperformance in cognitive functioning was identified in more than 50% of the older prisoners. Therefore, specific attention should be given to assessing (early) manifestations of neurodegenerative diseases e.g. dementia. Research has shown that there might be a possible link between dementia and behavioral changes, aggression and crime due to fronto-temporal dysfunctions (Hindley & Gordon, 2000; Liljegren et al., 2015). A reliable hetero-anamnesis on the functioning of newly admitted prisoners could be helpful for custodial staff and caregivers (Maschi et al., 2012). Besides it should be taken into account many older prisoners appear poorer self-advocates and behave more quiet than the younger prison population (House of Commons Justice Committee, 2013, cf. chapter 2).

Screening on physical age related health issues

In reference to the elevated rates of physical problems among older prisoners (cf.

accelerated aging, chapter 1), standardized screenings could potentially prevent age-related health problems that often remain undetected. Testing on hearing and vision problems should be a standard procedure (Williams & Abraldes, 2007). Hearing loss appears the most common sensory deficit in elderly patients, and is often under-recognized and poorly managed (Phan, McKenzie, Huang, Whitfield, & Chang, 2016) .

Smoking in prison

50% of the older prisoners are smoking daily, which are alarming results considering the high prevalence of self-reported respiratory health issues in this study. Factors including stress and being in prison may provoke smoking (Turan & Turan, 2016) and in psychiatric wards smoking behavior has been associated with attempts to reduce boredom and to facilitate social communication (De Kort, 2013). In some other countries, e.g. in the U.S. England and Wales, and Australia smoking cessation programs are increasingly being implemented (Belcher, Butler, Richmond, Wodak, & Wilhelm, 2006; McMillan, 2016), whereas in Belgian correctional institutions unlimited smoking in private cells and open places is still allowed. Furthermore, smoking has a social function and is used to cope with stress and boredom. It has been stated that a smoking ban does not seem to prevent tobacco use in prisons. Instead, tobacco cessation programs may be a better option. The cost-free provision of cessation medication may increase quitting rates among prisoners and prison staff (Turan & Turan, 2016).

Peer support for mentally declining older offenders

In the U.S., specialized geriatric units are developed for ageing prisoners with neurocognitive problems. Some of the existing dementia units use peer support: younger offenders support older offenders with medication administration, social support and protection against victimization (Maschi et al., 2012). Peer support and peer education were associated with positive health effects in persons who received this support in prison environments (Bagnall et al., 2015) and have been implemented in several settings e.g. HIV peer programs for female prisoners (Collica, 2010) and programs targeting self-injury (Griffiths & Bailey, 2015).

Peer support in order to prevent suicide and loneliness

The results of the M.I.N.I. showed that a quarter of the older prisoners dealt with suicidal ideations. Eighty percent was identified (De Jong-Gierveld scale) to be lonely of which one third could be classified in the category of severe loneliness (chapter 4). The idea to implement peer support (Griffiths & Bailey, 2015) could be a promising preventive intervention. Research findings suggest that prisoners who adopt 'listener roles' experience profound internal changes, shifts in self-identity and gain meaning and purpose in life (Perrin & Blagden, 2014).

Dealing with cumulative traumatic experiences in the life course

This dissertation revealed accumulated personal, social-structural and historical (in youth and later in lifetime) traumatic and stressful experiences in older offender populations (chapter 2 and chapter 4). Childhood maltreatment has been described as a pivotal, determining factor in the life course of male prisoners who commonly suffer from long-term consequences on their mental health (Sergentanis et al., 2014). A better understanding of trauma and stress in the life-course of older prisoners could be helpful to develop and improve theory-based interventions seeking to increase human rights, health, and well-being of older prisoners (Maschi, Viola, & Morgen, 2014).

6.3.2 Implications with respect to variables related to the QoL of older imprisoned offenders (RQ2): Suicide prevention and increasing opportunities for connectedness in prison

Prison can be considered as the common gateway through which each older offender has passed at least once in lifetime. Inside prison, disconnection, feelings of loneliness, hopelessness and psychosocial stress appeared to be related to suicidal thoughts and actions (Gupta & Girdhar, 2004). In this dissertation, older offenders admitted in the prison system for the first time later in the life course accounted for more than 50% of the ageing prison population. First time offenders appeared more vulnerable because they are un-experienced with the life in prison and they are often abruptly deprived from their social network outside. International research has shown that diversity in relationships (family, friends, neighbors) is important to provide different sorts of support (instrumental, emotional and social) and that is has positive effects on the well-being of aging people (Wang, 2016). Accessible family ties appeared strong correlates of well-being in aging populations (Litwin & Stoeckel, 2013). Yet, the maintenance of social capital appears less evident for older prisoners, since prison buildings may be far away from home and difficult to reach by public transport, restricted visiting hours are imposed and access controls are time-consuming. Accordingly such barriers may cause disconnection with the outside world which subsequently complicates the transition from prison to the community after release (National Institute of Justice, 2016).

The first days and weeks of custody are particular vulnerable periods for those offenders at risk of suicide. In the UK, The Prison Service has introduced reception, first night and induction processes to help identify and reduce this risk. Furthermore, already in 2004, the UK government introduced peer support as a significant focus in National Offender Management Service (NOMS) for England and Wales. *"Peer support generally is founded on the premise that those with similar personal experiences can offer a useful insight to those facing a similar situation including giving hope and encouragement* (Rowe, 2007, cited in Griffiths & Bailey, 2015, p. 157).

However more research is needed to examine issues of utilization and acceptability of peer support from the perspective of newly admitted prisoners (South et al., 2014).

6.3.3 Implications with respect to trajectories (RQ3)

A life course perspective

This dissertation indicated that older offenders often experienced adverse and traumatic events during lifetime. In addition, Ogle et al. (2014) revealed that traumatic experiences can have lasting effects at old age. Assessment for trauma and stressful life events and the provision of treatment could help to reduce psychological distress while in prison. Moreover, there is some evidence that untreated trauma and grief is related to increased recidivism rates (Leach, Burgess & Holmwood, 2008). Early detection and treatment of traumatic events of offenders at younger age might help to prevent the ongoing accumulation of reactive behavior (Maschi, Morgen, Zgoba, Courtney, & Ristow, 2011)..

Risks on offending and neurocognitive decline: ethical considerations for care trajectories

In general terms, the different focus of current leading theoretical models of offender rehabilitation, i.e. the Risk Need Responsivity model and the Good Lives Model, essentially reflect the quest to find the most suitable balance between the duty to ensure safety in society (offence reduction) and the individual right to have a good life (both for the person as well as for society).

The discussion on ethical and legal implications of dementia in older offenders (Fazel, 2002) offers a basis to reflect on the risks – needs balance of older offenders. Older offenders who have developed severe mental health problems affecting their sense of reality should be considered unfit to stand trial and accordingly should be referred to a care trajectory. In this regard more specific awareness should be devoted to age-related neurocognitive disorders, certainly when the symptoms are hidden in early stages of these disorders (van Alphen, Bleeker, Bonten, Afman & Oei, 2009). Referring to the Human Rights Act in the U.K and the European Convention on Human Rights, Fazel (2002) indicates that justifications for punishment may change in accordance with the deteriorating health of offenders. Alternatively to continuing incarceration, older mentally ill offenders should be taken care of in civil care facilities emphasizing both abilities and deficits, and aimed at the improvement of Quality of Life.

Create enabling environments for institutionalized older offenders

The results of the present dissertation indicate that one out of seven respondents reported to prefer to stay imprisoned for the remainder of their lifetime. Besides we found that older prisoners often kept on working in prison and since the availability of meaningful activities was strongly related to Quality of Life in prison, older offenders should preferably be accommodated in an environment in which they can feel useful and secured from victimization. Due to long-term disconnection from society, aggravated by cumulative disadvantage over the course of life, institutionalized older offenders often have poor self-esteem and have insufficient skills and/or external resources to

live independently in the community. For these offenders creating a safe and trusting 'enabling' environment, supporting persons to live a "good life", is recommended (Ward & Fortune, 2013). This underscores the importance of preparing persons for release and of creating environments in which positive self-value and self-esteem are facilitated (Alaphilippe, 2008).

Obstacles in the trajectories of long-term forensic psychiatric patients

Transferring older forensic psychiatric patients to an appropriate place of residence proved to be difficult as several characteristics such as a history of sex offences, substance abuse and arson appeared to be common exclusion criteria in mid-security and other (forensic) psychiatric facilities (chapter 1, 2 &5)(Butler et al., 2008). Moreover, being old seems to be considered as an informal indicator of therapeutically immutability which makes finding a place for older forensic offenders even harder (chapter 5).

Already in 2009, a report about the association of poverty and psychiatric care in Flanders indicated that the following patient profiles would become increasingly at risk for exclusion of care: psychiatric patients with intellectual disabilities, older patients with dementia and associated severe behavior problems, forensic patients, and chronic psychiatric patients who do not have the capabilities to live independently in society (Danau, Nielandt, & Vranken, 2009). In essence, this "list" summarizes the profile of cumulative disadvantaged people in society, comprising a considerable number of the older forensic psychiatric patients in the present study.

Reduce the risk and simultaneously improve the Quality of Life

According to the Good Lives Model, two key tasks for care practitioners in the rehabilitation of offenders can be distinguished. First, a normative task which involves the support of individuals in their process about what would constitute a "good (pro-social) life" for them and secondly a task of capability-building that involves the attainment of internal and external resources and capabilities that are needed to realize a "good (personally meaningful) life' (Ward & Fortune, 2013).

Remarkably, important elements for a "good life" that were mentioned by older forensic psychiatric patients about their (care) trajectories (chapter 5) almost entirely covered the most important factors in reducing reoffending that were retrieved in an earlier study about older prisoners in the UK:(1) suitable accommodation (2) fear of returning to prison, (3) family contact and support and (4) employment (Omolade, 2014). Besides, the same themes had been raised by older non-offenders in the community (evidently except for the fear of return to prison) (Gabriel & Bowling, 2004).

6.4 Limitations of the study

The limitations of each separate study have been discussed earlier in the corresponding chapters. In this section we intend to focus on the most prominent limitations for the dissertation "in globo".

A first limitation is that we did not investigate older forensic psychiatric patients that were living outside prison about their Quality of Life in the same way as we did in prison settings. Although the Commissions of Social Defense and probation services supported us in every possible way in the recruitment of respondents, there were high levels of drop out when we attempted to reach older forensic psychiatric patients living at home or in treatment settings. Because of this, we were not able to collect self-report data and were limited to case note files, that may not reflect the perspective of the persons themselves.

Secondly, we assessed Quality of Life by the WHOQOL-BREF, a generic Quality of Life instrument that is applicable in a diversity of populations (cf. chapter 1). This enabled us to compare groups, e.g. older prisoners in relation to older people in nursing homes or older forensic patients living in forensic institutions and those living at home. As already mentioned above, the study was limited to imprisoned older offenders. The application of a specific prison-based Quality of Life instrument such as the MQPL (*Measuring the Quality of Prison Life,* Liebling, 2016) might have been an alternative that would have allowed comparison with other prison populations internationally and/or "control groups" within prison.

The sample of this dissertation had several limitations: it was restricted to Flanders, the most vulnerable people were excluded (due to ethical reasons) and we only used the perspective of the older offenders, without corroborating this with the perspective of other stakeholders (such a family, social network member, prison and/or treatment staff).

6.5 Recommendations for future research

The findings reported in this dissertation underscore the complex interactions between individual and environmental factors with regard to "a good life" and hence also the Quality of Life of older offenders.

In our view, an integrative approach comprising a medical, gerontological, psychological, (special needs) educational, and social work perspective may be the best way to further develop our knowledge on older offenders and how to support them, with respect for the norms and laws in society. In accordance with the principles of the Good Lives Model, it is important for future research to focus on personal and contextual resources that are needed to realize a fulfilling life of older offenders (Ward & Fortune, 2013). A focus on the personal perspectives of older offenders is essential, as the realization of human primary goods is different for each of us.

The development of standardized screening and assessment tools and procedures in order to identify the most vulnerable older offenders with respect to physical and mental problems as early as possible is an important challenge. Early detection should preferably be combined with initiatives to increase the awareness of professionals who come in contact with older offenders in a diversity of environments. Police officers and prison wardens , for example, could be supported in recognizing early signs of aging

problems and consequent behavior that could be difficult to interpret or understand. Based on the findings of this dissertation, low self-awareness about one's psychiatric illness could possibly explain why psychopathology turned out to be unrelated to Quality of Life. This assumption needs further study and corroboration.

In order to understand the factors that are related to the Quality of Life of older offenders in different living contexts, it is essential to collect data on older offenders living at home or in long-term (forensic) psychiatric services and other contexts that were not included in this dissertation. In view of the current transition to community oriented care and support, a focus should be placed on older offenders living in their natural environment. Also in this context, it might be interesting to study loneliness, isolation, and self-neglect - aspects that are often linked to institutional residency.
Providing opportunities to increase personal skills and external resources in the community are essential aspects in order to develop a 'good life'. The results of this dissertation identified having meaningful activities in life as one of the 'primary human goods' that is significantly related the Quality of Life of older prisoners. Consequently, future research could focus on what older offenders consider to be valuable activities and how this could be translated in support strategies. Loneliness has been identified as main challenge to tackle.
Further research on how older offenders may act as 'listeners' to other offenders might be an interesting avenue, as older offenders may have a good profile for this task. Vice versa, peer support for aging long term imprisoned offenders (e.g 'buddy') by younger prisoners would be an interesting way to provide opportunities to develop intergenerational supportive relationships in prison and other secure settings. In general, the results of this dissertation accord well with the findings of Maschi et al. (2014) who emphasized the diversity within the population of older prisoners with regard to demographic, clinical, social, legal profiles, prison service use patterns, and professional and personal contacts.
Based on the results of the present dissertation, more research on good life-supportive aspects for older offenders on micro-level (e.g. peer support, providing opportunities for meaningful activities); meso-level (e.g. screening and assessment of mental health issues and age-related issues, providing opportunities for the creation of 'enabling environments' in correctional establishments); and macro-level (e.g. tackling stigma/ labeling, facilitating transitions between residential and community-based services) may lead to a way forward, underpinning *"(…) a strengths-based and inclusive model of reentry [that] contrasts with much of the correctional rehabilitation discourse that concentrates on offender re-offense risks and their management"* (Fox, 2016, p. 68).

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Data storage fact sheets

The current dissertation contains analyses from a literature review (**chapter 1** – cf. Data storage fact sheet 1) and three empirical studies:

1) A retrospective case note study of older forensic psychiatric patients in Flanders, ≥ 60 years of age (n=174) was conducted in the four Commissions of Social Defense. The files were screened locally for (1) demographic characteristics, (2) criminal history as well as (3) mental and physical health issues (**chapter 2** – cf. Data storage fact sheet 2).
2) Structured interviews of 110 older prisoners (convicted offenders and imprisoned forensic psychiatric patients, > 60 years of age) in Flanders. The questions focused on physical, psychological, social and environmental characteristics. The interview also comprised five standardized and validated instruments on (1) Quality of Life *(WHOQOL-BREF)* (2) age-related frailty *(TFI)* (3) mental health problems *(M.I.N.I. version 5.0.0 DSM-IV) (4)* loneliness *(De Jong-Gierveld Loneliness Scale)* and (5) cognitive functioning *(MoCA)* (**chapter 3** and **chapter 4** – cf. Data storage fact sheet 3).
3) Open interviews of older forensic psychiatric patient (n=8) about how they perceive their detention and care trajectory (**chapter 5** – cf. Data storage fact sheet 4).

Data storage fact sheet Study 1

Study into the characteristics and quality of life of older offenders
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2. Information about the datasets to which this sheet applies

* Reference of the publication in which the datasets are reported:
  De Smet, S., Vandevelde, S., Verté, D., & Broekaert, E. (2010). What is currently known about older mentally Ill offenders in forensic contexts: results from a literature review. *International Journal Of Social Sciences And Humanity Studies*, 2(1), 127–135.
  De Smet, S. Chapter 1 of the present dissertation.*Study into the characteristics and quality of life of older offenders*, Unpublished PhD.-dissertation of Ghent University, Department of Special Needs Education and Vrije Universiteit Brussel, Department of Educational Sciences.
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Data storage fact sheet — Study 2

Study into the characteristics and quality of life of older offenders
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De Smet, S., De Keyzer, W., De Donder, L., Ryan, D., Verté, D., Broekaert, E. & Vandevelde, S. (2016). Older offenders deemed criminally irresponsible in Flanders (Belgium): Descriptive results from a retrospective case note study. *International Journal of Law and Psychiatry*, 46, 35-41.
De Smet, S. Chapter 2. *Study into the characteristics and quality of life of older offenders*, unpublished PhD. dissertation of Ghent University, Department of Special Needs Education and Vrije Universiteit Brussel, Department of Educational Sciences.

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  ☒ file(s) containing analyses. Specify: SPSS output files
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Data storage fact sheet Study 3

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2. Information about the datasets to which this sheet applies

* Reference of the publication in which the datasets are reported:
  De Smet, S., De Donder L., Ryan D., Van, Regenmortel S., Brosens D., Vandevelde S., *Factors related to the Quality of Life of older prisoners* (under review after revision).
  De Smet, S., De Smet, S., Vandevelde, S, Ryan, D., Verté, D., Broekaert, E. & Liesbeth De Donder. *Needs and quality of life of older imprisoned offenders in Belgium* (submitted).
  De Smet, S. chapter 3 and chapter 4. *Study into the characteristics and quality of life of older offenders*, unpublished PhD. dissertation of Ghent University, Department of Special Needs Education and Vrije Universiteit Brussel, Department of Educational Sciences.
* Which datasets in that publication does this sheet apply to?: This sheet applies to the dataset applied in the above mentioned articles/corresponding chapters.

3. Information about the files that have been stored

3a. Raw data

* Have the raw data been stored by the main researcher? ☒ YES / ❑ NO
  If NO, please justify:

* On which platform are the raw data stored?
  ☒ researcher PC
  ❑ research group file server

☒ other (specify): paper versions questionnaires stored in office Stefaan De Smet, in HoGent (University College Ghent) Campus Vesalius room 11.59.

* Who has direct access to the raw data (i.e., without intervention of another person)?
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  ❑ responsible ZAP
  ❑ all members of the research group
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3b. Other files

* Which other files have been stored?
  ☒ file(s) describing the transition from raw data to reported results. Specify: Data of the interviews were put in Qualtrics (online survey programme) and exported to SPSS.
  ☒ file(s) containing processed data. Specify: SPSS-files (output-files and syntaxes), AMOS-files (in relation to the structural equation modelling).
  ❑ file(s) containing analyses. Specify: ...
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Data storage fact sheet Study 4

Study into the characteristics and quality of life of older offenders
Author: Stefaan De Smet / *Date:* 01/12/2016

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If a response is not received when using the above contact details, please send an email to data.pp@ugent.be or contact Data Management, Faculty of Psychology and Educational Sciences, Henri Dunantlaan 2, 9000 Ghent, Belgium.

2. Information about the datasets to which this sheet applies

* Reference of the publication in which the datasets are reported:
De Smet, S., Van Hecke, N., Verté, D., Broekaert, E., Ryan, D., & Vandevelde, S. (2015). Treatment and control: a qualitative study of older mentally ill offenders' perceptions on their detention and care trajectory. *International Journal Of Offender Therapy And Comparative Criminology*, 59(9), 964–985.
De Smet, S., Chapter 5. *Study into the characteristics and quality of life of older offenders*, unpublished PhD. dissertation of Ghent University, Department of Special Needs Education and Vrije Universiteit Brussel, Department of Educational Sciences.

* Which datasets in that publication does this sheet apply to?: Audio recordings and N-vivo

3. Information about the files that have been stored

3a. Raw data

* Have the raw data been stored by the main researcher? ☒ YES / ❑ NO
If NO, please justify:

* On which platform are the raw data stored?
☒ researcher PC
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❑ other (specify): ...

* Who has direct access to the raw data (i.e., without intervention of another person)?
  ☒ main researcher
  ❑ responsible ZAP
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3b. Other files

* Which other files have been stored?
  ☒ file(s) describing the transition from raw data to reported results. Specify: transcribed interviews, NVIVO project file (containing nodes, coded text fragments, …)
  ☒ file(s) containing processed data. Specify: NVIVO project file
  ☒ file(s) containing analyses. Specify: : NVIVO project file
  ☒ files(s) containing information about informed consent
  ☒ a file specifying legal and ethical provisions
  ❑ file(s) that describe the content of the stored files and how this content should be interpreted. Specify: ...
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  ☒ individual PC
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Nederlandstalige samenvatting

Onderzoek naar kenmerken en kwaliteit van leven van ouderen die een misdrijf hebben gepleegd

Achtergrond, doelstellingen en methodologie van het onderzoek

De vergrijzing in de bevolking laat zich in toenemende mate voelen in alle geledingen van het maatschappelijk bestel. Of en in welke mate dit in de Vlaamse populatie van personen die een misdrijf hebben gepleegd, ook het geval is werd tot op heden evenwel nog niet onderzocht.
Om aan dit tekort aan wetenschappelijke kennis tegemoet te komen, werden in dit doctoraatsproefschrift de volgende drie onderzoeksvragen vooropgesteld:

1. Wat zijn de kenmerken van oudere plegers van misdrijven in Vlaanderen?
2. Welke variabelen zijn gerelateerd aan de QoL van oudere plegers van misdrijven in Vlaanderen?
3. Welke (zorg) trajecten hebben oudere geïnterneerden doorlopen en hoe hebben zij deze ervaren?

In lijn met recente ontwikkelingen in de rehabilitatie van personen die een misdrijf hebben gepleegd (Barendregt, Van der Laan, Bongers, & Van Nieuwenhuizen, 2013; Van Damme, 2015) wordt dit doctoraatsonderzoek theoretisch onderbouwd vanuit Quality of Life (QOL) en het Good Lives Model, een sterktegericht rehabilitatiemodel voor personen die een misdrijf hebben gepleegd (Ward, Yates, & Willis, 2012). In functie hiervan wordt tevens bijzondere aandacht geschonken aan de manier waarop oudere geïnterneerden hun zorgtrajecten zelf hebben beleefd. Op basis van de persoonlijke visie van de respondenten naar hun Kwaliteit van Leven en de noden die hierbij werden aangegeven worden in dit proefschrift aanbevelingen gedaan voor een benadering die een klassieke éénzijdige focus op risicobeheersing overstijgt.
Om een antwoord te kunnen bieden op de gestelde onderzoeksvragen werd een mixed-method onderzoeksdesign opgezet waarbij oudere personen die een misdrijf hebben gepleegd werden gedefinieerd als diegenen die de leeftijd van zestig jaar of meer hadden bereikt en onder een interneringsstatuut stonden bij één van de vier Vlaamse Commissies ter Bescherming van de Maatschappij. Daarnaast werden ook diegenen van 60 jaar of meer die zich in een Vlaamse gevangenis bevonden als veroordeelde of geïnterneerde in de studie betrokken.
Volgens de principes van de mixed-method onderzoeksmethodiek zoals beschreven door Johnson & Onwuegbuzie (2004) werden in dit doctoraal onderzoek vier verschillende onderzoeksmethoden ingezet: (1) een literatuurstudie (2) een retrospectieve dossierstudie (3) gestructureerde interviews met inbegrip van gestructureerde vragenlijsten en (4) open interviews.
In functie van de eerste onderzoeksvraag werden de kenmerken van oudere personen die een misdrijf hebben gepleegd op basis van een literatuuronderzoek in kaart gebracht, waarbij specifiek werd gefocust op mogelijke verschillen tussen oudere veroordeelden en geïnterneerden (studie 1). Vervolgens werden sociodemografische-,

leeftijdsgebonden-, criminologische- en gezondheidsgerelateerde kenmerken onderzocht op basis van een retrospectieve dossierstudie van geïnterneerden (studie 2). Ten derde, werden de kenmerken onderzocht van oudere veroordeelden en geïnterneerden die in de gevangenis verbleven en dit met betrekking tot vier centrale domeinen in het Kwaliteit van Leven concept, met name de lichamelijke-, psychologische-, sociale- en omgevingsgerelateerde domeinen. Hiertoe werden 110 respondenten in de Vlaamse gevangenis geïnterviewd aan de hand van een vragenlijst die peilde naar sociodemografische achtergrondinformatie evenals naar hun ervaringen met het gevangenisleven. Tijdens dit interview werden eveneens vijf gestandaardiseerde vragenlijsten afgenomen m.b.t. (1) de Kwaliteit van Leven aan de hand van een instrument ontwikkeld door de Wereld Gezondheidsorganisatie (WHO) met name de WHOQOL-BREF (Skevington, Lotfy, & O'Connell, 2004), (2) een schaal om ouderdomsgerelateerde kwetsbaarheid te meten, met name de Tilburg Frailty Indicator (TFI) (Gobbens, Luijkx, & van Assen, 2013) (3) psychiatrische ziektebeelden aan de hand van de Mini International Neuropsychiatric Interview, M.I.N.I. version 5.0.0 DSM-IV (Sheehan & Lecrubier, 2006), (4) eenzaamheid met de De Jong-Gierveld Loneliness Scale (DGL) (De Jong Gierveld & Tilburg, 2010) en (5) cognitief functioneren met de Montreal Cognitive Assessment, MoCA (2015).

In verband met de tweede onderzoeksvraag werd onderzocht welke factoren verband hielden met de Kwaliteit van Leven van oudere personen in de gevangenis. Hiertoe werden eerst reeds gemeten factoren gecategoriseerd in drie gebieden die essentieel worden geacht om een 'goed leven' te kunnen realiseren met name 'het lichaam', 'het zelf' en 'het sociale' (Ward, 2002) dewelke vervolgens in relatie werden gebracht met de uitkomsten van vier onderscheiden domeinen die door de WHOQOL-BREF in kaart waren gebracht.

In functie van de derde onderzoeksvraag werden open interviews gebruikt om ten gronde te begrijpen hoe geïnterneerden de zorg ervaren hadden die ze in hun levensloop ontvingen in de diverse trajecten sinds hun eerste veroordeling of internering .

Samengevat brengen we in dit proefschrift de kenmerken van oudere veroordeelde gedetineerden (hoofdstuk 4) en oudere geïnterneerden (hoofdstuk 2 en hoofdstuk 5) in kaart. Hierbij wordt uitgegaan van het Kwaliteit van Leven (QoL)-concept dat in de praktijk vaak toegepast wordt om de zorgkwaliteit op meerdere belangrijke levensdomeinen te organiseren en te evalueren. In lijn met de recente ontwikkelingen in de theorievorming m.b.t. de rehabilitatie van personen die een misdrijf hebben gepleegd steunen we in dit proefschrift op het Good Lives Model (GLM), een sterktegericht rehabilitatiemodel ontwikkeld door Ward en collega's. Volgens dit model dient "rehabilitatie" erop gericht te zijn behoeften op het lichamelijke, psychische en sociale vlak in te vullen zodat een "goed leven" ("goed" zowel voor de persoon als in overeenstemming met de normen/wetten van de samenleving) mogelijk kan worden gemaakt. Het GLM is dan ook tegelijkertijd gericht op zowel recidivebeperking (risicogerichte insteek) als op het verhogen van iemands Kwaliteit van Leven (QoL-gerichte insteek).

Voornaamste bevindingen per hoofdstuk

Op basis van een literatuurstudie (hoofdstuk 1) bleek dat een groot deel van de oudere personen die een misdrijf hebben gepleegd op diverse levensdomeinen bijzonder kwetsbaar is. Algemeen wordt aangenomen dat de meerderheid van de oudere personen die een misdrijf hebben gepleegd de gevolgen draagt van traumatische en/of stressvolle levensgebeurtenissen (Maschi, Morgen, Zgoba, Courtney, & Ristow, 2011). Vaak begint de zogenaamde "cumulatieve achterstelling" reeds bij aanvang van het leven in socio-economisch slechte leefomstandigheden (Lopes et al., 2012). Zowel lichamelijke als psychische mishandeling, eenzijdige voeding, en een lagere scholingsgraad zijn voorbeelden van factoren die tot de hypothese hebben geleid dat de meeste gedetineerden een versneld verouderingsproces doorlopen (Bretschneider, Elger, & Wangmo, 2013).

Globaal kunnen er drie grote groepen van oudere gedetineerden onderscheiden worden: (1) zij die op jongere leeftijd ernstige feiten plegen en levenslang in de gevangenis verblijven, (2) zij die een levensloop kennen waarin periodes van gevangenschap zich afwisselen met periodes van vrijheid en (3) zij die pas op latere leeftijd voor het eerst in de gevangenis terecht komen (Aday, 2003). Voor de eerste twee groepen is het gevangenisregime bekend. Veel gedetineerden hebben er zich zelfs grotendeels aan geconformeerd. Dit fenomeen, dat ook institutionalisering of in het Engels 'prisonization' wordt genoemd, maakt dat langdurig opgesloten gedetineerden meer moeite hebben om zich na vrijlating nog aan te passen aan het leven in de gewone maatschappij (Paterline & Petersen, 1999). Omgekeerd betekent een eerste opsluiting op latere leeftijd vaak een ingrijpend aanpassingsproces omdat men plots volledig afgesneden wordt van de buitenwereld zonder aanwezigheid van kinderen, kleinkinderen en andere familieleden (Gupta & Girdhar, 2004).

In de eerste studie (hoofdstuk 2) werden de karakteristieken van de oudere geïnterneerden (n=174) in Vlaanderen in kaart gebracht aan de hand van een dossierstudie in de vier Vlaamse Commissies Ter Bescherming van de Maatschappij. Hierbij werd een vergelijking gemaakt tussen geïnterneerden in de gevangenis en geïnterneerden die - onder voorwaarden - in zorginstellingen, psychiatrische instellingen, woonzorgcentra, en andere diensten verbleven.

Uit de resultaten bleek dat bijna één derde van de geïnterneerden zich nog steeds in de gevangenis bevond en dat deze groep ten opzichte van de anderen significant meer levensdelicten en seksuele delicten hadden gepleegd. Zij kregen ook meer persoonlijkheids- en gedragskenmerken toegeschreven die een opname in een voorziening buiten de gevangenis bemoeilijken (bvb. manipulatie, agressie, provocatief gedrag, gebrek aan verantwoordelijkheidsgevoel, etc.) . Opmerkelijk was ook dat één derde van de geïnterneerden hun eerste geregistreerd misdrijf hadden gepleegd na de leeftijd van 50 jaar. Uit de dossiers bleek dat in meer dan 60% van de gevallen problematisch alcoholgebruik vermeld stond en dat psychotische stoornissen bijna in de helft van alle dossiers werden vernoemd. De prevalentie van gerapporteerde

dementie bleek in lijn met deze van de algemene bevolking in Vlaanderen in dezelfde leeftijdscategorieën. Het was evenwel opmerkelijk dat bij geen enkele oudere geïnterneerde in de gevangenis dementie beschreven stond.

In een tweede empirische studie (hoofdstuk 3) werd onderzocht op welke wijze een aantal factoren (in het Good Lives Model, "primary goods" genoemd) gelinkt aan een "goed leven" gerelateerd zijn aan de vier domeinen van QoL met name het fysieke domein, het psychische domein, het sociale domein en het domein met betrekking tot de omgeving. De domeinen werden in kaart gebracht door middel van de WHOQOL-BREF, een gevalideerde vragenlijst van de Wereld Gezondheidsorganisatie. De tevredenheid over activiteiten in de gevangenis bleken het sterkst gerelateerd aan de QoL van de respondenten. Het al dan niet hebben van een psychiatrische stoornis bleek op geen enkel domein significant gerelateerd te zijn, terwijl dit voor het hebben van suïcidale gedachten wel het geval was.

In een derde empirische studie (hoofdstuk 4) werden oudere gedetineerden geïnterviewd (n=110) waarvan er 78 veroordeeld waren en 32 het statuut van internering hadden. Er werd gebruik gemaakt van een gestructureerd interview waarvan de vragen deels bestonden uit items die op basis van de literatuur werden opgesteld en die te maken hadden met sociale, psychische, fysieke en omgevingsaspecten van ouderen in een gevangeniscontext. Daarnaast werden ook de reeds eerder beschreven gevalideerde meetinstrumenten gebruikt die peilden naar Kwaliteit van Leven (WHOQOL-BREF), naar leeftijdsgebonden kwetsbaarheid (TFI), de aanwezigheid van psychische stoornissen op basis van kenmerken afgeleid uit de officiële DSM-IV diagnoses (M.I.N.I.), eenzaamheid (DJG) en een test om het cognitief functioneren te screenen (MoCA). Uit deze studie bleek dat één op de negen oudere gedetineerden ouder waren dan 70 jaar maar dat desondanks toch vier op de tien van alle respondenten voldeed aan de criteria van ouderdomsgerelateerde kwetsbaarheid op basis van de TFI. Meer dan de helft bleek onder het gemiddelde van het normale cognitieve functioneren (geheugen, ruimtelijk inzicht, enz.) te scoren. Eén derde van alle respondenten beantwoordde aan de criteria voor de hoogste graad van eenzaamheid volgens de eenzaamheidsschaal (DGL) en één derde bleek sociaal volledig geïsoleerd. De groep van geïnterneerden bleek significant meer sociaal geïsoleerd in vergelijking met veroordeelden. Ze bleken ook significant meer gekenmerkt door elementen die wijzen op institutionalisering zoals het al langer in de gevangenis opgesloten zitten, meer afgezonderd zitten op de eigen cel, uit vrij wil in de gevangenis willen blijven tot de dood, en meer angst hebben om de gevangenis te verlaten.

In een vierde empirische studie (hoofdstuk 5) werden acht geïnterneerden (al dan niet verblijvend in de gevangenis) aan de hand van (kwalitatieve) open interviews bevraagd m.b.t. het traject dat ze in hun levensloop hadden doorlopen vanaf de eerste keer dat ze een veroordeling opliepen tot het moment van het interview. Aandacht voor hoe ze dit percipieerden stond hierbij voorop. Op basis van de resultaten bleek dat de respondenten vaker positieve uitspraken deden over hun verblijf in de gevangenis dan over settings waar ze behandeld werden. Hoewel de bewegingsvrijheid in

gevangenissen beperkt is, bleken de participanten subjectief meer autonomie in gevangeniscontexten te ervaren. Het mogen roken in de cel, het kunnen gaan werken en iets bijverdienen, het niet 'moeten' deelnemen aan 'zinloze' therapieën, en het niet 'moeten' nemen van psychofarmaca bleken voor hen belangrijke argumenten. Het belang van autonomie werd verder bevestigd door de vaststelling dat zelfstandig kunnen wonen als meest positief ervaren woonvorm werd beschouwd.

Conclusies in relatie tot de onderzoeksvragen; implicaties voor praktijk en beleid, aanbevelingen voor verder onderzoek

Conclusies

Uit de studie is gebleken dat de groep van oudere veroordeelde plegers van misdrijven in gevangenissen en geïnterneerden in absolute aantallen beperkt is in Vlaanderen maar tezelfdertijd ook dat beide subpopulaties samen in vele opzichten heterogeen zijn samengesteld met betrekking tot lichamelijke, psychische, en sociale noden.
Subjectief voelen de respondenten zich fysiek niet slechter dan buiten de gevangenis maar het aantal gezondheidsklachten blijkt desalniettemin groot. Een belangrijke vaststelling op gezondheidsvlak is dat er nog veel gerookt wordt door ouderen in de gevangenis en dat effecten van alcoholisme een belangrijke invloed lijken te hebben op de levensloop. Er zijn ook indicaties dat niet aan alle gezondheidsklachten gevolg wordt gegeven in de gevangenis. Dit kan verklaard worden door tekorten aan verzorgend personeel maar het zou ook kunnen dat ouderen hun klachten minder uitdrukkelijk uiten dan jongeren in de gevangenis (en zo dus gezien kunnen worden als 'poor self-advocates'). Op psychisch vlak valt het op dat een aanzienlijk aantal oudere gedetineerden een traumatisch verleden met zich meedraagt en dat hieraan de nodige aandacht moet besteed worden, niet in het minst omdat ongeveer een kwart onder hen suïcidale gedachten blijkt te hebben. Dat meer dan de helft van de proefpersonen onder het niveau van normaal cognitief functioneren scoorde op basis van de MoCA is opmerkelijk, maar kan niet éénduidig verklaard worden.
Het belang van autonomie en van laagdrempeligheid met betrekking tot therapeutische vereisten in behandelingscontexten kwamen n de open interviews sterk naar voor. Zowel de open -interviews als de analyse van factoren die gelinkt kunnen worden aan de mate van Kwaliteit van Leven (hoofdstuk 3) gaven duidelijk aan de beschikbaarheid van een geschikt activiteitenaanbod als essentieel moet worden ingeschat.

Implicaties praktijk en beleid

Volgens het Good lives Model kunnen er voor professionelen die actief zijn in de rehabilitatie van personen die een misdrijf hebben gepleegd twee kerntaken onderscheiden worden: ten eerste, een normatieve taak die erop gericht is om

personen te ondersteunen in het proces dat leidt naar de opbouw van een "goed (pro-sociaal) leven" en ten tweede een competentie-versterkende taak die inhoudt dat er moet gezocht worden naar zowel interne als externe ondersteuningsmiddelen en de ontwikkeling van de eigen mogelijkheden die noodzakelijk zijn om een goed (persoonlijk betekenisvol) leven daadwerkelijk mogelijk te maken (Ward & Fortune, 2013).

Het viel uit onze onderzoeksresultaten, op basis van de open interviews, ook af te leiden dat belangrijke factoren die gerelateerd zijn aan een "goed leven" nagenoeg volledig samenvielen met de belangrijkste recidive-beperkende factoren die in een Britse studie werden gerapporteerd over oudere gedetineerden, met name het hebben van geschikte verblijfsplaats, angst om terug te keren naar de gevangenis, het hebben van familiaal contact en ondersteuning en het hebben van geschikt werk of activiteiten (Omolade, 2014). Deze elementen, op angst om terug te keren naar de gevangenis na, blijken universeel belangrijk voor elke mens en dit ongeacht de leeftijd. Gelijkaardige thema's werden dan ook eerder als belangrijk genoemd voor de Kwaliteit van Leven door ouderen in de reguliere maatschappij (Farquhar, 1995; Smith, 2008). Deze belangrijke bevinding pleit voor keuze tot laagdrempelige ondersteuning die erop gericht moet zijn om aan deze basis universele noden tegemoet te komen.

Aangezien een groot deel van de gedetineerden pas op latere leeftijd voor het eerst in de gevangenis terechtkomt en gebleken is dat het risico op zelfdoding bij deze zogenaamde 'first offenders' hoger is, zou een toepassing van 'peer support' of hulp door medegedetineerden aan medegedetineerden een mogelijke denkpiste kunnen zijn. Ook om de rehabilitatie van oudere veroordeelden en geïnterneerden in de maatschappij te bevorderen zouden de principes van het Good Lives Model van toepassing kunnen zijn en door peer support van ervaringsdeskundigen ondersteund kunnen worden. Dit lijkt vooral belangrijk voor diegenen die lang in de gevangenis of in residentiële voorzieningen verbleven en die laagdrempelige vorm van (sterktegerichte) ondersteuning nodig hebben. Uit voorliggend onderzoek blijkt immers dat autonomie en het gevoel van "geen dingen te moeten doen die men niet 'wil' (maar eigenlijk niet 'aankan')" een belangrijke rol spelen in het al dan niet ervaren van een kwaliteitsvol bestaan of een 'good life'.

Aanbevelingen voor verder onderzoek

De resultaten van dit doctoraatsonderzoek suggereren dat meer onderzoek nodig is naar werkzame elementen die de ontwikkeling van een 'goed leven' kunnen helpen ondersteunen. Op micro-niveau zou bijvoorbeeld kunnen gedacht worden aan het installeren en opvolgen van projecten met reeds bestaande vormen van peer support (ondersteuning door mede-gedetineerden, andere forensische psychiatrische patiënten etc..) en het ontwikkelen van strategieën om betekenisvolle activiteiten te kunnen aanbieden voor ouderen, zowel binnen de gevangenis als tijdens het re-integratieproces buiten de gevangeniscontext. Op meso-niveau kan het belang

van screening voor lichamelijke en psychische ouderdomsproblemen worden aangegeven. Op macro-niveau is het voor oudere plegers van misdrijven belangrijk dat er bvb. gewerkt wordt aan de-stigmatizering op maatschappelijk niveau, en dat meer onderzoek wordt verricht m.b.t. de overgang van institutionele woonvormen (inclusief gevangenis) naar verblijfplaatsen in de samenleving.

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